

NEHALEM RIVER BASIN

14299800 NEHALEM RIVER NEAR VERNONIA, OR

LOCATION.--Lat 45°48'26", long 123°16'55", in NE 1/4 NE 1/4 sec.27 ,T.4N., R.5 W., Columbia County, Hydrologic Unit 17100202, on left bank, 6.75 mi southwest of Vernonia and at mile 100.7.

DRAINAGE AREA.--69.8mi².

PERIOD OF RECORD.--July 2001 to September 2002.

GAGE.--Water-stage recorder. Datum of gage is 640 ft above NGVD of 1929.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,560 ft³/s Jan. 7, gage height, 11.57; minimum discharge , 3.2 ft³/s Sept. 26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	31	3280	240	502	245	170	100	35	24	7.1	4.0
2	4.7	20	2070	321	487	224	156	94	34	21	6.8	4.0
3	4.5	15	1230	317	e520	205	144	90	32	19	6.7	3.9
4	4.4	13	967	306	e510	189	134	85	32	19	7.0	4.0
5	5.0	12	838	317	520	179	127	85	31	20	7.6	4.1
6	4.9	12	993	704	581	196	120	90	29	18	9.2	4.5
7	5.1	10	1170	3830	957	176	112	82	29	17	9.5	5.2
8	6.1	9.6	888	3200	1210	164	105	75	29	18	7.8	5.3
9	7.0	9.7	698	1590	1110	158	117	71	30	18	7.0	5.6
10	8.2	9.2	607	1050	860	229	189	68	27	16	6.4	5.6
11	13	8.8	597	775	704	809	170	65	26	14	6.1	4.8
12	12	9.9	571	690	585	1250	158	61	24	13	6.0	4.4
13	9.2	19	988	578	498	1180	158	60	23	12	5.5	4.1
14	9.0	870	2010	498	429	1130	304	59	22	12	5.0	3.9
15	8.3	451	1390	436	376	858	306	55	22	12	4.7	3.9
16	7.7	e270	2020	393	348	689	319	53	22	11	4.7	4.2
17	7.0	177	3080	360	e310	563	312	52	23	11	4.8	4.9
18	6.9	132	1760	326	e290	485	298	50	26	12	4.6	5.6
19	6.6	182	1380	371	e340	608	273	52	23	12	4.6	5.1
20	6.5	470	1090	481	e350	671	249	51	22	12	4.6	4.6
21	7.3	687	855	716	462	601	225	49	20	11	4.7	4.3
22	11	1370	704	712	504	515	204	46	18	9.4	5.0	4.1
23	34	1210	579	663	478	443	184	44	18	8.9	5.0	3.8
24	33	791	489	809	422	384	167	42	20	8.7	4.7	3.6
25	16	575	418	2510	372	336	153	40	18	8.6	4.5	3.5
26	e11	447	363	1640	332	296	144	40	17	8.7	4.6	3.5
27	e9.3	365	327	1090	298	268	136	40	16	8.4	4.9	3.5
28	e13	773	321	796	270	242	123	48	21	8.0	4.8	3.4
29	10	e1600	281	624	---	218	114	51	45	8.0	4.4	3.6
30	e10	e1800	257	517	---	199	106	43	28	7.8	4.0	6.6
31	e52	---	243	506	---	183	---	38	---	7.5	4.0	---
TOTAL	347.7	12349.2	32464	27366	14625	13893	5477	1879	762	406.0	176.3	131.6
MEAN	11.2	412	1047	883	522	448	183	60.6	25.4	13.1	5.69	4.39
MAX	52	1800	3280	3830	1210	1250	319	100	45	24	9.5	6.6
MIN	4.4	8.8	243	240	270	158	105	38	16	7.5	4.0	3.4
AC-FT	690	24490	64390	54280	29010	27560	10860	3730	1510	805	350	261
CFSM	0.16	5.90	15.0	12.7	7.49	6.42	2.62	0.87	0.36	0.19	0.08	0.06
IN.	0.19	6.58	17.31	14.59	7.80	7.41	2.92	1.00	0.41	0.22	0.09	0.07

WTR YR 2002 TOTAL 109876.8 MEAN 301 MAX 3830 MIN 3.4 AC-FT 217900 CFSM 4.31 IN. 58.58

e Estimated

NEHALEM RIVER BASIN

14301000 NEHALEM RIVER NEAR FOSS, OR

LOCATION.--Lat 45°42'15", long 123°45'15", in NW 1/4 sec.35, T.3 N., R.9 W., Tillamook County, Hydrologic Unit 17100202, on right bank 0.2 mi upstream from Cook Creek, 2.2 mi northeast of Foss, and at mile 13.5.

DRAINAGE AREA.--667 mi².

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 32.60 ft above NGVD of 1929 (State Highway Department bench mark). Prior to Nov. 11, 1939, nonrecording gage.

REMARKS.--Records good except for estimated daily discharges, which are fair. No regulation. Several small diversions for irrigation and domestic use upstream from station. National Weather Service telemeter at station.

AVERAGE DISCHARGE.--63 years (water years 1940-2002), 2,681 ft³/s, 54.60 in/yr, 1,942,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 70,300 ft³/s Feb. 8, 1996, gage height, 29.56 ft, based on slope-area measurement of peak flow; minimum discharge, 34 ft³/s Aug. 29-31, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 19,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 1	2000	23,500	14.94	Jan. 7	2200	23,600	14.98
Dec. 16	2230	*27,900	*16.55	Jan. 25	1000	23,300	14.86

Minimum discharge, 63 ft³/s Sept. 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	125	1260	22000	2070	6310	2490	1850	1160	518	423	e133	80
2	114	1090	21400	2300	5860	2250	1720	1090	475	362	e132	79
3	e105	925	15900	2500	5860	2050	1580	1030	449	317	e131	79
4	98	784	11000	2480	5750	1970	1480	967	432	293	e135	77
5	90	736	9980	2480	5450	1780	1410	963	420	276	e134	75
6	85	672	10600	5070	5650	1800	1360	1000	413	264	133	75
7	83	613	11800	19300	7330	1790	1310	999	399	252	130	77
8	93	563	10100	21100	9560	1690	1220	927	401	250	127	80
9	95	517	8050	16800	10400	1620	1280	856	394	241	127	80
10	129	477	6960	10500	8820	2220	2620	809	383	230	121	82
11	229	450	7100	7390	7160	7200	2920	765	375	222	117	84
12	258	453	7140	6540	5910	11300	2870	727	353	210	111	84
13	262	1140	10700	5880	4990	10800	2990	706	334	199	106	83
14	291	14200	17200	5020	4270	10400	5980	705	319	188	103	81
15	273	11600	15500	4340	3720	8760	6090	679	e315	182	98	78
16	243	7440	19800	3850	3340	6980	6120	641	e310	178	96	78
17	219	4880	23800	3560	3080	5840	5590	615	e315	172	94	84
18	198	3550	19600	3300	2890	5210	4790	602	329	170	91	82
19	181	3300	14200	3800	3360	8050	4080	584	330	169	89	80
20	167	4940	10900	6550	3540	9510	3510	588	319	169	89	79
21	173	7210	8500	8880	4710	7930	3030	586	300	167	89	78
22	324	13400	6780	8560	5050	6220	2660	567	281	162	90	76
23	752	14600	5540	8000	4800	5070	2550	544	271	157	90	75
24	795	10300	4580	10200	4420	4310	2070	515	264	152	89	73
25	664	6950	3860	21500	3860	3740	1850	493	254	148	88	70
26	576	5300	3320	19800	3420	3240	1710	478	247	146	89	69
27	509	4220	2930	13800	3060	2900	1650	473	242	144	90	66
28	494	6990	2760	9030	2750	2660	1510	535	286	141	89	65
29	455	12700	2520	6820	---	2430	1360	679	597	139	86	67
30	472	14900	2250	5560	---	2200	1250	638	496	e137	84	88
31	1260	---	2100	5880	---	2010	---	573	---	e134	82	---
TOTAL	9812	156160	318870	252860	145320	146420	80210	22494	10821	6394	3263	2324
MEAN	317	5205	10290	8157	5190	4723	2674	726	361	206	105	77.5
MAX	1260	14900	23800	21500	10400	11300	6120	1160	597	423	135	88
MIN	83	450	2100	2070	2750	1620	1220	473	242	134	82	65
AC-FT	19460	309700	632500	501500	288200	290400	159100	446200	21460	12680	6470	4610
CFSM	.47	7.80	15.4	12.2	7.78	7.08	4.01	1.09	.54	.31	.16	.12
IN.	.55	8.71	17.78	14.10	8.10	8.17	4.47	1.25	.60	.36	.18	.13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2002, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1940	808	3698	1998	69.9	1953
1941	3787	9256	1974	154	1994
1942	6254	11390	1956	599	1977
1943	6195	12450	1971	596	1977
1944	5801	13000	1999	1066	1977
1945	4249	8696	1956	1171	1992
1946	2703	6389	1996	1149	1941
1947	1282	3028	1948	520	1989
1948	622	1591	1968	250	1992
1949	275	747	1983	137	1967
1950	148	314	1968	62.5	1967
1951	210	911	1997	63.6	1967

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1940 - 2002

ANNUAL TOTAL	767985	1154948	
ANNUAL MEAN	2104	3164	2681
HIGHEST ANNUAL MEAN			4292
LOWEST ANNUAL MEAN			1044
HIGHEST DAILY MEAN	23800	23800	61600
LOWEST DAILY MEAN	83	65	36
ANNUAL SEVEN-DAY MINIMUM	93	69	38
ANNUAL RUNOFF (AC-FT)	1523000	2291000	1942000
ANNUAL RUNOFF (CFSM)	3.15	4.74	4.02
ANNUAL RUNOFF (INCHES)	42.83	64.41	54.60
10 PERCENT EXCEEDS	4900	9530	7260
50 PERCENT EXCEEDS	1070	809	1140
90 PERCENT EXCEEDS	140	89	125

e Estimated

14301500 WILSON RIVER NEAR TILLAMOOK, OR

LOCATION.--Lat 45°29'05", long 123°41'20", in NW 1/4 NE 1/4 sec.17, T.1 S., R.8 W., Tillamook County, Hydrologic Unit 17100203, on right bank 0.1 mi downstream from Negro Jack Creek, 8.0 mi east of Tillamook, and at mile 11.5.

DRAINAGE AREA.--161 mi², at former site, 2.1 mi downstream.

PERIOD OF RECORD.--October 1914 to September 1915, August to November 1916, July 1931 to current year. Prior to January 1915 monthly discharge only, published in WSP 1318.

REVISED RECORDS.--WSP 1398: 1953. WSP 1738: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 71.89 ft above NGVD of 1929. Dec. 18, 1914, to Nov. 4, 1916, nonrecording gage at site 2.8 mi downstream at different datum. July 30, 1931, to Sept. 30, 1938, nonrecording gage at site 2.82 mi downstream at datum 28.83 ft lower. Oct. 1, 1938, to Oct. 17, 1968, water-stage recorder at site 2.1 mi downstream at datum 29.76 ft lower. Oct. 18, 1968 to Sept. 6, 1973 at site 50 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Discharge for the period Nov. 25 to Dec. 19 computed from data obtained through the U.S. Army Corps of Engineers Columbia River Operational Hydromet System (CROHMS) database. No regulation. Small diversions for domestic use upstream from station.

AVERAGE DISCHARGE.--72 years (water years 1915, 1932-2002), 1,181 ft³/s, 99.65 in/yr, 855,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 36,000 ft³/s Jan. 20, 1972, gage height, 16.91 ft, site then in use; maximum gage height, 19.59 ft Dec. 27, 1998, from floodmark; minimum discharge, 32 ft³/s Sept. 5, 1973, but may have been less for short period following a landslide Jan. 31, 1965.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in February 1916 reached a stage of 20.8 ft, from floodmark, site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 12,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 14	0630	15,500	13.91	Jan. 7	2330	15,100	13.73
Dec. 13	2300	12,800	12.83	Jan. 25	0830	15,700	13.96
Dec. 16	2300	*16,400	*14.22				

Minimum discharge, 51 ft³/s Sept. 26-29.

DISCHARGE, in CFS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	748	9600	1000	2500	945	878	559	343	340	94	63
2	65	554	7200	1160	2120	844	829	531	310	286	92	62
3	64	451	4400	1190	2270	761	780	507	286	254	90	61
4	63	385	3370	1210	2220	695	747	474	270	232	98	60
5	60	357	3000	1210	2060	659	753	487	266	218	97	60
6	61	312	4250	2820	2580	712	780	496	251	203	98	59
7	61	276	4890	12100	4200	647	740	464	237	192	93	59
8	66	251	3460	10100	4030	606	674	429	238	192	90	62
9	66	230	2720	5330	3540	580	805	406	234	182	87	61
10	90	213	2470	3400	2800	1050	2140	387	217	170	84	60
11	131	201	2690	2450	2350	5740	2170	367	206	161	82	59
12	109	208	2830	2450	1940	6300	2310	350	197	154	80	58
13	115	939	6620	2220	1630	4310	2860	347	188	147	78	57
14	120	12100	9390	1870	1390	3520	5930	351	181	142	75	56
15	106	5730	5480	1590	1230	2780	3840	326	177	138	74	56
16	94	3530	10800	1400	1140	2270	3080	311	175	135	74	60
17	87	2240	10800	1250	1070	1870	2650	307	200	132	73	69
18	82	1600	5750	1160	1070	1740	2190	290	254	129	72	63
19	79	1500	4460	1430	1800	3710	1840	283	214	128	70	60
20	76	2250	3540	2890	1830	4090	1590	295	190	126	70	58
21	89	3290	2790	4250	3060	3120	1370	279	177	122	70	56
22	287	6790	2260	3170	3140	2420	1200	279	169	116	70	55
23	501	5830	1870	2610	2760	2000	1060	263	164	112	70	54
24	363	3530	1590	4830	2310	1820	950	250	161	110	69	53
25	275	2480	1390	12400	1790	1640	858	241	155	109	67	53
26	225	1990	1230	6710	1460	1470	808	233	149	107	67	52
27	214	1620	1120	4130	1230	1320	758	240	147	105	67	51
28	214	3840	1150	2830	1070	1200	688	333	209	103	66	51
29	195	6150	1040	2130	---	1110	634	594	734	101	64	53
30	233	5750	965	1770	---	1020	593	482	444	99	63	65
31	948	---	965	2340	---	942	---	392	---	96	63	---
TOTAL	5206	75345	124090	105400	60590	61891	46505	11553	7143	4841	2407	1746
MEAN	167.9	2512	4003	3400	2164	1996	1550	372.7	238.1	156.2	77.65	58.20
MAX	948	12100	10800	12400	4200	6300	5930	594	734	340	98	69
MIN	60	201	965	1000	1070	580	593	233	147	96	63	51
AC-FT	10330	149400	246100	209100	120200	122800	92240	22920	14170	9600	4770	3460
CFSM	1.04	15.6	24.9	21.1	13.4	12.4	9.63	2.31	1.48	0.97	0.48	0.36
IN.	1.20	17.41	28.67	24.35	14.00	14.30	10.75	2.67	1.65	1.12	0.56	0.40

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 2002, BY WATER YEAR (WY)

	1915	1898	2692	2509	2232	1762	1175	621.0	339.9	167.6	104.6	152.6
MEAN	563.9	1898	2692	2509	2232	1762	1175	621.0	339.9	167.6	104.6	152.6
MAX	2249	4266	7988	5776	5166	3637	2622	1391	876	514	240	780
(WY)	1998	1996	1934	1953	1999	1956	1991	1933	1933	1983	1968	1959
MIN	43.5	87.2	378	344	634	406	426	202	131	76.5	44.3	40.1
(WY)	1988	1937	1977	1977	1993	1992	1939	1939	1992	1992	1967	1967

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1915 - 2002

ANNUAL TOTAL	337337	506717	
ANNUAL MEAN	924.2	1388	1181
HIGHEST ANNUAL MEAN			1811
LOWEST ANNUAL MEAN			495
HIGHEST DAILY MEAN	12100	12400	28000
LOWEST DAILY MEAN	60	51	34
ANNUAL SEVEN-DAY MINIMUM	63	52	35
ANNUAL RUNOFF (AC-FT)	669100	1005000	855400
ANNUAL RUNOFF (CFSM)	5.74	8.62	7.33
ANNUAL RUNOFF (INCHES)	77.94	117.08	99.65
10 PERCENT EXCEEDS	1960	3610	2920
50 PERCENT EXCEEDS	477	464	571
90 PERCENT EXCEEDS	83	65	87

TRASK RIVER BASIN

14302480 TRASK RIVER ABOVE CEDAR CREEK, NEAR TILLAMOOK, OR

LOCATION.--Lat 45°26'47", long 123°42'33", in NW 1/4 SE 1/4 sec.30, T.1 S., R.8 W., Tillamook County, Hydrologic Unit 17100203, on right bank 0.1 mi upstream from Cedar Creek, 6.8 mi east of Tillamook, and at mile 10.95.

DRAINAGE AREA.--156 mi², at Long Prairie Road bridge, 4.0 mi downstream, where all discharge measurements are made.

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

GAGE.--Water-stage recorder. Elevation of gage is 70 ft above NGVD of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. No regulation. Water diverted from the J.W. Barney Reservoir (capacity 20,000 acre-ft) on the Middle Fork of the North Fork of the Trask River to the Tualatin River by the City of Hillsboro and Oregon Department of Fish and Wildlife.

AVERAGE DISCHARGE.--6 years (water years 1997-2002), 1,093 ft³/s, 95.17 in/yr, 791,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,500 ft³/s Nov. 25, 1999, gage height, 21.77 ft; minimum discharge, 56 ft³/s Sept. 24, 26, 27, 2002.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 8, 1996 reached a stage of 23.2 ft, from floodmark; discharge, 25,800 ft³/s, from slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 9,300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 17	0030	10,200	15.50	Jan. 25	0930	*12,000	*16.54
Minimum discharge, 56 ft ³ /s Sept. 24, 26-28.							

DISCHARGE, in CFS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	456	7540	894	1990	978	933	580	297	258	101	71
2	69	401	5650	917	1810	922	877	556	278	223	99	70
3	68	345	3820	923	1990	869	828	536	267	205	97	69
4	68	305	3060	904	1950	822	791	507	258	196	105	68
5	66	298	2970	911	1860	803	769	544	265	188	106	68
6	67	261	3810	1660	2050	889	763	575	251	177	104	68
7	68	233	4170	5570	2970	817	738	525	239	170	101	69
8	76	209	3190	6000	3600	775	690	488	235	173	95	71
9	75	193	2580	3770	3390	762	781	463	238	165	92	69
10	104	179	2390	2670	2780	1280	1500	444	220	153	90	66
11	176	169	2540	2030	2380	3750	1480	425	211	147	88	65
12	143	183	2650	2170	2010	5010	1420	408	202	143	86	66
13	176	473	4730	1960	1730	3910	1620	402	190	139	83	66
14	175	5920	7170	1710	1510	3360	3470	409	184	136	79	64
15	143	3250	4740	1490	1350	2730	2800	379	184	134	79	65
16	113	2190	6730	1360	1270	2270	2570	362	182	131	79	71
17	102	1530	7870	1270	1180	1910	2270	357	196	129	79	97
18	94	1170	4950	1240	1150	1770	1900	337	265	128	78	80
19	87	1100	3940	1590	1620	4440	1610	329	225	128	78	71
20	84	1360	3200	3360	1610	4270	1390	335	192	128	79	67
21	108	1830	2520	4730	1920	3150	1220	314	180	122	79	64
22	351	4760	2040	3660	2030	2460	1090	321	175	117	79	62
23	544	4800	1670	3010	2150	2050	977	298	173	114	78	60
24	355	3030	1430	4060	1920	1860	892	284	170	115	76	59
25	264	2150	1250	9880	1610	1660	821	274	161	114	74	58
26	211	1710	1120	6020	1390	1490	793	264	154	114	75	58
27	195	1410	1040	3960	1230	1370	766	273	153	113	75	58
28	189	2650	1040	2870	1110	1270	694	346	205	109	73	58
29	166	4240	929	2220	---	1170	650	440	528	107	70	60
30	203	5000	873	1850	---	1080	610	362	310	104	70	88
31	507	---	887	2020	---	998	---	321	---	103	72	---
TOTAL	5117	51805	102499	86679	53560	60895	37713	12458	6788	4483	2619	2026
MEAN	165.1	1727	3306	2796	1913	1964	1257	401.9	226.3	144.6	84.48	67.53
MAX	544	5920	7870	9880	3600	5010	3470	580	528	258	106	97
MIN	66	169	873	894	1110	762	610	264	153	103	70	58
AC-FT	10150	102800	203300	171900	106200	120800	74800	24710	13460	8890	5190	4020
CFSM	1.06	11.1	21.2	17.9	12.3	12.6	8.06	2.58	1.45	0.93	0.54	0.43
IN.	1.22	12.35	24.44	20.67	12.77	14.52	8.99	2.97	1.62	1.07	0.62	0.48

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2002, BY WATER YEAR (WY)

	1997	1998	1999	2000	2001	2002
MEAN	502.1	1715	2790	2251	1975	1614
MAX	1688	2370	4157	2893	4345	2538
(WY)	1998	2000	1997	1998	1999	2002
MIN	127	336	849	570	650	673
(WY)	2000	2001	2001	2001	2001	2000

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1997 - 2002
ANNUAL TOTAL	285552	426642	
ANNUAL MEAN	782.3	1169	1093
HIGHEST ANNUAL MEAN			1449
LOWEST ANNUAL MEAN			461
HIGHEST DAILY MEAN	7870	Dec 17	9880
LOWEST DAILY MEAN	66	Oct 5	58
ANNUAL SEVEN-DAY MINIMUM	68	Oct 1	59
ANNUAL RUNOFF (AC-FT)	566400	846200	791600
ANNUAL RUNOFF (CFSM)	5.01	7.49	7.00
ANNUAL RUNOFF (INCHES)	68.09	101.74	95.17
10 PERCENT EXCEEDS	1470	3290	2820
50 PERCENT EXCEEDS	498	444	544
90 PERCENT EXCEEDS	85	72	92

14302800 MCGUIRE LAKE NEAR FAIRDALE, OR

LOCATION.--Lat 45°18'30", long 123°24'30", in NW 1/4 SE 1/4 sec.15, T.3 S., R.6 W., Yamhill County, Hydrologic Unit 17100203, on control tower in reservoir on Nestucca River, 0.3 mi upstream from Walker Creek, and 5.0 mi southwest of Fairdale.

DRAINAGE AREA.--2.85 mi².

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

GAGE.--Nonrecording gage. Datum of gage is NGVD of 1929.

REMARKS.--Reservoir is formed by earthfill dam with ungated spillway. Capacity of reservoir is 3,840 acre-ft between elevations 1,810.0 ft and 1,865.5 ft. Dead storage negligible. Under normal operation, reservoir is filled in the spring (April or May) and drained when fall rains start. There is no planned storage during winter months; however, during periods of heavy runoff, inflow may be greater than capacity of outlet tunnel and there may be temporary storage. Water is used during summer months for municipal supply of city of McMinnville.

COOPERATION.--Elevation and capacity table furnished by city of McMinnville Water and Light Department. Elevations based on once-daily staff gage readings. Readings are taken on an average of 13 per month.

EXTREMES FOR PERIOD OF RECORD.--Maximum observed contents, 3,980 acre-ft Dec. 15, 1999, elevation, 1,866.4 ft; no contents most of time during winter months.

EXTREMES FOR CURRENT YEAR.--Maximum observed contents, 2,510 acre-ft several days in April, May and June, elevation, 1,855.0 ft; minimum contents observed, zero acre-ft Dec. 28, 31, elevation, 1,805.0 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30.....	1,841.3	1,290	
Oct. 31.....	1,810.5	10	-1,280
Nov. 30.....	1,823.1	328	+318
Dec. 31.....	1,810.0	0	-328
CAL YR 2001.....	-	-	-570
Jan. 31.....	1,810.0	0	0
Feb. 28.....	1,833.0	760	+760
Mar. 31.....	1,853.0	2,310	+1,550
Apr. 30.....	1,854.7	2,480	+170
May 31.....	1,855.0	2,510	+30
June 30.....	1,854.9	2,500	-10
July 31.....	1,850.9	2,100	-400
Aug. 31.....	1,842.0	1,340	-760
Sept.30.....	1,833.5	790	-550
WTR YR 2002.....	-	-	-500

NESTUCCA RIVER BASIN

14302900 NESTUCCA RIVER NEAR FAIRDALE, OR

LOCATION.--Lat 45°18'40", long 123°25'05", in SW 1/4 NW 1/4 sec.15, T.3 S., R.6 W., Yamhill County, Hydrologic Unit 17100203, on right bank 100 ft upstream from former Meadow Lake, 0.4 mi downstream from Walker Creek, 5.3 mi southwest of Fairdale, and at mile 49.3.

DRAINAGE AREA.--6.18 mi².

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

REVISED RECORDS.--WDR OR-97-1: 1994-95 (adjusted discharge), WDR OR-00-1: 1999 (adjusted discharge).

GAGE.--Water-stage recorder. Datum of gage is 1,778.99 ft above NGVD of 1929 (levels by city of McMinnville).

REMARKS.--No estimated daily discharges. Records good. Flow regulated since March 1969 by McGuire Lake about 1 mi upstream from gage (station 14302800). During winter months lake is empty except when inflow exceeds capacity of outlet tunnel. Trans-basin diversion upstream from station to Haskins Creek Basin (see station 14196001). About 1,879 acre-ft diverted during the 2000 water year, primarily during summer and fall.

AVERAGE DISCHARGE.--42 years (water years 1961-2002), 31.7 ft³/s, 69.66 in/yr, 22,970 acre-ft/yr, adjusted for storage and diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 876 ft³/s Dec. 22, 1964, gage height, 10.43 ft; minimum discharge, 0.16 ft³/s Sept. 13, 14, 2002.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 430 ft³/s Jan. 7, gage height, 6.54 ft; minimum discharge, 0.16 ft³/s Sept. 13, 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	10	280	33	72	14	11	7.6	11	2.0	0.64	0.39
2	2.7	4.0	190	31	47	12	9.8	9.0	11	1.7	0.69	0.38
3	2.7	3.3	128	35	55	11	9.0	8.4	6.1	1.5	0.70	0.37
4	2.7	3.0	110	31	47	9.9	8.7	8.8	5.9	1.5	0.81	0.37
5	2.7	3.6	99	38	48	9.8	9.0	11	5.6	1.5	0.80	0.41
6	2.7	3.3	139	118	64	16	9.2	13	5.6	1.4	0.84	0.42
7	2.6	2.4	141	296	96	12	8.4	15	4.7	1.4	0.76	0.37
8	2.8	2.4	128	255	103	11	7.8	17	4.3	1.4	0.73	0.42
9	2.9	4.1	116	157	91	13	11	7.8	4.5	1.4	0.66	0.54
10	3.8	4.0	111	127	75	36	26	8.8	4.2	1.1	0.64	0.61
11	3.7	4.0	109	111	59	92	24	13	4.1	1.0	0.62	0.44
12	3.1	6.7	107	113	49	101	19	12	4.1	0.97	0.55	0.49
13	3.2	31	165	101	42	75	28	7.2	4.1	0.90	0.53	0.18
14	3.2	132	191	84	37	54	63	7.0	4.0	0.93	0.49	0.50
15	8.1	84	145	47	27	40	53	7.0	4.1	0.85	0.49	0.23
16	18	68	221	25	15	31	65	6.9	4.1	0.83	0.49	0.61
17	18	57	222	34	14	24	50	7.4	5.0	0.82	0.51	0.85
18	17	42	167	41	16	24	42	7.4	6.5	0.88	0.50	0.51
19	17	45	141	48	39	97	48	8.3	5.7	0.86	0.51	0.41
20	17	69	127	106	34	112	48	8.2	5.0	0.88	0.53	0.35
21	17	89	118	125	42	96	57	7.9	5.6	0.78	0.51	0.33
22	23	166	107	80	40	65	28	7.8	10	0.74	0.57	0.32
23	30	126	97	72	47	44	14	7.4	9.9	0.73	0.52	0.29
24	40	100	75	98	37	38	15	8.0	9.3	0.76	0.51	0.30
25	37	88	38	271	29	31	12	11	2.8	0.73	0.82	0.44
26	36	79	33	168	23	23	9.4	11	2.3	0.73	0.44	0.39
27	34	71	32	129	19	17	18	8.7	2.3	0.75	0.38	0.21
28	32	100	34	114	16	15	24	8.3	4.1	0.73	0.34	0.19
29	36	120	27	99	---	14	13	9.7	8.4	0.69	0.40	0.25
30	43	169	25	81	---	12	7.3	8.0	2.6	0.66	0.38	0.77
31	39	---	27	66	---	11	---	8.2	---	0.65	0.40	---
TOTAL	502.3	1686.8	3650	3134	1283	1160.7	747.6	286.8	166.9	31.77	17.76	12.34
MEAN	16.2	56.2	118	101	45.8	37.4	24.9	9.25	5.56	1.02	0.57	0.41
MAX	43	169	280	296	103	112	65	17	11	2.0	0.84	0.85
MIN	1.4	2.4	25	25	14	9.8	7.3	6.9	2.3	0.65	0.34	0.18
AC-FT	996	3350	7240	6220	2540	2300	1480	569	331	63	35	24
MEAN†	3.97	62.1	112	101	59.4	62.6	27.7	9.74	6.07	2.16	-1.74	1.16
CFSM†	0.64	10.1	18.2	16.4	9.61	10.1	4.49	1.58	0.98	0.35	-0.28	0.19
IN.†	0.74	11.22	20.98	18.88	10.01	11.68	5.01	1.82	1.10	0.40	-0.32	0.21
AC-FT†	244	3698	6912	6220	3300	3850	1650	599	361	133	-107	69

CAL YR 2001 TOTAL 7963.30 MEAN 21.8 MAX 280 MIN 0.71 AC-FT 15800 MEAN† 23.8 CFSM† 3.85 IN.† 52.32 AC-FT† 17240
WTR YR 2002 TOTAL 12679.97 MEAN 34.7 MAX 296 MIN 0.18 AC-FT 25150 MEAN† 37.2 CFSM† 6.02 IN.† 81.73 AC-FT† 26900

† Adjusted for storage and diversion from McGuire Lake.

Note - Negative values shown for adjusted values during summer period are a result of evaporation exceeding inflows to McGuire Lake.

14303200 TUCCA CREEK NEAR BLAINE, OR

LOCATION.--Lat 45°19'28", long 123°32'43", in SE 1/4 NW 1/4 sec.9, T.3 S., R.7 W., Tillamook County, Hydrologic Unit 17100203, on right bank at road bridge, 80 ft upstream from confluence with Elk Creek, and 8 mi northeast of Blaine.

DRAINAGE AREA.--3.09 mi².

PERIOD OF RECORD.--July 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,400 ft above NGVD of 1929, from topographic map.

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

AVERAGE DISCHARGE.--19 years (water years 1984-2002), 17.29 ft³/s, 76.04 in/yr, 12,530 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 680 ft³/s Feb. 6, 1996, gage height, 4.30 ft, from rating curve extended above 190 ft³/s on basis of slope-area measurement of peak flow; maximum gage height, 5.49 ft, Dec. 27, 1998; minimum discharge, 0.46 ft³/s Sept. 30, Oct. 1, 2, 1987.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 180 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 16	2200	*163	*3.95	No other peak greater than base discharge.			
Minimum discharge, 0.99 ft ³ /s Oct. 1-5.							

DISCHARGE, in CFS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.99	9.2	118	16	26	18	17	9.7	5.4	3.9	1.8	1.3
2	0.99	8.4	89	16	25	16	16	9.3	5.3	3.6	1.8	1.3
3	0.99	7.4	63	16	27	14	15	8.8	5.1	3.4	1.8	1.3
4	0.99	7.2	48	16	28	13	14	8.4	4.9	3.4	2.0	1.3
5	e1.0	7.2	40	16	29	13	13	9.3	4.9	3.2	1.9	1.3
6	e1.0	6.7	60	25	31	14	13	9.3	4.8	3.1	1.9	1.3
7	e1.0	6.3	78	61	41	12	12	8.5	4.7	3.0	1.8	1.3
8	e1.1	6.1	59	83	50	12	11	8.1	4.7	3.1	1.7	1.3
9	e1.1	5.7	46	62	49	12	13	7.8	4.6	3.0	1.7	1.2
10	e1.5	5.4	43	47	42	21	e27	7.4	4.3	2.8	1.7	1.2
11	e2.2	5.3	46	37	35	53	e27	7.3	4.2	2.7	1.6	1.2
12	e1.9	5.8	53	36	31	74	e30	7.0	4.0	2.6	1.5	1.1
13	e2.4	14	90	32	27	57	e36	7.1	3.8	2.6	1.5	1.1
14	e2.4	65	127	30	24	48	52	6.8	3.8	2.5	1.5	1.1
15	e2.0	51	90	28	21	41	48	6.6	3.8	2.4	1.5	1.1
16	e1.8	40	125	26	20	35	43	6.6	3.7	2.4	1.4	1.6
17	e1.6	33	134	24	18	30	39	6.5	4.4	2.4	1.4	2.2
18	e1.4	28	90	22	18	27	35	6.3	4.7	2.4	1.4	1.4
19	e1.4	27	65	24	26	59	30	6.1	3.9	2.4	1.4	1.3
20	e1.3	28	52	46	27	67	25	6.2	3.6	2.3	1.4	1.2
21	e1.6	33	42	73	30	53	22	6.0	3.4	2.3	1.4	1.1
22	e4.2	71	36	55	33	43	19	6.0	3.2	2.2	1.4	1.1
23	e6.3	83	31	44	37	37	17	5.6	3.2	2.1	1.4	1.1
24	4.4	60	27	57	34	34	15	5.5	3.2	2.1	1.4	1.1
25	3.3	46	24	126	30	32	14	5.4	3.0	2.1	1.4	1.1
26	2.8	38	22	85	26	29	13	5.1	2.9	2.1	1.4	1.1
27	3.0	33	20	56	23	27	12	5.4	2.9	2.1	1.3	1.1
28	2.8	54	19	41	20	25	11	6.5	4.5	2.0	1.3	1.1
29	2.6	79	18	33	---	23	11	7.0	7.0	2.0	1.3	1.3
30	3.7	88	17	28	---	20	10	6.0	4.4	1.9	1.3	2.3
31	11	---	16	27	---	19	---	5.7	---	1.9	1.3	---
TOTAL	74.76	951.7	1788	1288	828	978	660	217.3	126.3	80.0	47.6	38.5
MEAN	2.412	31.72	57.68	41.55	29.57	31.55	22.00	7.010	4.210	2.581	1.535	1.283
MAX	11	88	134	126	50	74	52	9.7	7.0	3.9	2.0	2.3
MIN	0.99	5.3	16	16	18	12	10	5.1	2.9	1.9	1.3	1.1
AC-FT	148	1890	3550	2550	1640	1940	1310	431	251	159	94	76
CFSM	0.78	10.3	18.7	13.4	9.57	10.2	7.12	2.27	1.36	0.84	0.50	0.42
IN.	0.90	11.46	21.53	15.51	9.97	11.77	7.95	2.62	1.52	0.96	0.57	0.46

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2002, BY WATER YEAR (WY)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	5.943	31.79	37.17	33.75	34.22	24.23	17.71	10.50	6.618	3.081	1.754	1.880							
MAX	29.2	66.1	98.5	60.0	98.0	42.4	41.4	18.7	12.0	4.49	2.44	7.64							
(WY)	1998	1996	1997	1999	1999	1997	1996	1998	1990	1997	1997	1997							
MIN	0.95	1.76	15.9	9.03	10.3	6.59	8.66	4.02	2.40	1.65	1.11	0.91							
(WY)	1988	1994	1987	2001	1993	1992	2000	1989	1992	1992	1986	1987							

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR				FOR 2002 WATER YEAR				WATER YEARS 1984 - 2002			
ANNUAL TOTAL	4850.15				7078.16							
ANNUAL MEAN	13.29				19.39				17.29			
HIGHEST ANNUAL MEAN									29.4			
LOWEST ANNUAL MEAN									7.65			
HIGHEST DAILY MEAN	134				134				460			
LOWEST DAILY MEAN	0.99				0.99				0.55			
ANNUAL SEVEN-DAY MINIMUM	0.99				0.99				0.63			
ANNUAL RUNOFF (AC-FT)	9620				14040				12530			
ANNUAL RUNOFF (CFSM)	4.30				6.28				5.60			
ANNUAL RUNOFF (INCHES)	58.39				85.21				76.04			
10 PERCENT EXCEEDS	32				52				40			
50 PERCENT EXCEEDS	7.6				7.4				8.5			
90 PERCENT EXCEEDS	1.3				1.3				1.4			

e Estimated

SILETZ RIVER BASIN

14305500 SILETZ RIVER AT SILETZ, OR

LOCATION.--Lat 44°42'55", long 123°53'10", in NW 1/4 SW 1/4 sec.11, T.10 S., R.10 W., Lincoln County, Hydrologic Unit 17100204, on right bank, 1.8 mi downstream from Baker Creek, 1.5 mi east of Siletz, and at mile 42.6.

DRAINAGE AREA.--202 mi².

PERIOD OF RECORD.--October 1905 to December 1908, January 1910 to November 1911, January 1912 to April 1912, December 1924 to current year. Monthly discharges, January to December 1909, published in WSP 1318.

REVISED RECORDS.--WSP 1935: 1943, 1947-49(M), 1953-58(M).

GAGE.--Water-stage recorder. Datum of gage is 102.32 ft above NGVD of 1929. Oct. 1, 1905, to Sept 30, 1938, nonrecording gage at various sites within 2.5 mi downstream at different datums.

REMARKS.--No estimated daily discharges. Records good. Slight regulation from logponds. Small diversions upstream from station for irrigation. Continuous water-quality records for the period February 1972 to September 1985 have been collected at this location.

AVERAGE DISCHARGE.--81 years (water years 1906-08, 1911, 1926-2002), 1,515 ft³/s, 101.90 in/yr, 1,097,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 53,800 ft³/s Nov. 26, 1999, gage height, 28.62 ft, from rating curve extended above 22,700 ft³/s on basis of slope-area measurement of peak flow; minimum discharge, 47 ft³/s Oct. 20, 21, 29, 1987.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Nov. 20, 1921, reached a stage of 31.6 ft, at site 2.5 mi downstream at different datum, from floodmark, discharge, 40,800 ft³/s, from rating curve extended above 17,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 14,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 22	2000	16,000	14.99	Jan. 8	0030	*18,200	*15.64
Dec. 13	2230	15,500	14.76	Jan. 25	1100	16,700	14.90

Minimum discharge, 62 ft³/s Sept. 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	1080	10000	1210	2780	1170	926	722	536	578	134	80
2	77	1090	8130	1410	2470	1060	875	684	482	492	131	80
3	76	875	5410	1410	2620	969	830	655	444	438	129	78
4	75	708	4390	1360	2530	895	792	614	419	401	132	76
5	74	662	5370	1390	2400	862	780	610	410	374	137	76
6	72	556	5690	3580	2540	1380	830	658	387	342	133	76
7	72	489	5280	12500	3830	1270	802	589	359	318	128	76
8	77	441	3860	13300	4960	1170	749	548	352	308	123	78
9	80	404	3080	6800	4210	1100	952	519	341	293	118	77
10	88	373	2960	4340	3270	1930	2400	497	324	268	114	75
11	231	349	3160	3130	2640	6060	2620	479	308	254	111	73
12	140	368	3340	3040	2170	7760	2830	461	298	239	107	72
13	147	763	8300	2620	1850	5030	3030	447	281	229	104	71
14	136	9390	10900	2260	1610	3990	6960	446	272	216	99	69
15	136	4120	6330	1930	1430	3310	4550	420	268	211	97	69
16	117	2960	9190	1720	1310	2810	3740	401	260	203	96	76
17	107	2090	9570	1580	1200	2390	3440	409	317	196	98	132
18	100	1590	5730	1460	1160	2240	2880	384	569	193	96	129
19	95	1550	4190	1980	1990	5970	2410	369	403	192	95	96
20	93	1660	3250	5120	1900	4970	2050	393	336	192	95	86
21	92	2240	2570	6890	2430	3560	1760	369	306	192	95	78
22	358	9720	2110	5060	2400	2770	1540	397	290	185	95	73
23	954	8670	1760	4020	2810	2290	1360	367	282	180	94	70
24	452	4450	1500	4570	2480	2020	1220	342	271	173	93	68
25	338	3070	1310	13300	2010	1770	1100	326	259	167	91	67
26	279	2410	1160	8840	1700	1570	1040	312	247	162	90	65
27	246	1950	1060	5430	1470	1420	1010	310	239	156	89	64
28	239	4020	1190	3770	1300	1280	898	504	272	150	87	64
29	209	6280	1040	2890	---	1170	826	1020	1160	146	83	65
30	396	5630	967	2360	---	1070	770	771	727	141	79	79
31	1260	---	1130	2530	---	989	---	617	---	136	78	---
TOTAL	6896	79958	133927	131800	65470	76245	55970	15640	11419	7725	3251	2338
MEAN	222	2665	4320	4252	2338	2460	1866	505	381	249	105	77.9
MAX	1260	9720	10900	13300	4960	7760	6960	1020	1160	578	137	132
MIN	72	349	967	1210	1160	862	749	310	239	136	78	64
AC-FT	13680	158600	265600	261400	129900	151200	111000	31020	22650	15320	6450	4640
CFSM	1.10	13.2	21.4	21.0	11.6	12.2	9.24	2.50	1.88	1.23	0.52	0.39
IN.	1.27	14.72	24.66	24.27	12.06	14.04	10.31	2.88	2.10	1.42	0.60	0.43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1906 - 2002, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	711	2446	3364	3256	2946	2216	1491	837	498	224	131	195	1602	602	419	1138	1927	1907	1934	1953	1949	1932	1937	1933	1906	1910	1968	1959	50.1	72.4	401	518	752	557	387	233	144	99.7	64.5	58.6	1988	1930	1977	1977	1973	1941	1926	1939	1928	1992	1992	1992	1965																																																	

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1906 - 2002
ANNUAL TOTAL	394633	590639	
ANNUAL MEAN	1081	1618	1515
HIGHEST ANNUAL MEAN			2337
LOWEST ANNUAL MEAN			660
HIGHEST DAILY MEAN	10900	Dec 14	36700
LOWEST DAILY MEAN	72	Oct 6	47
ANNUAL SEVEN-DAY MINIMUM	75	Oct 2	66
ANNUAL RUNOFF (AC-FT)	782800		1172000
ANNUAL RUNOFF (CFSM)		5.35	8.01
ANNUAL RUNOFF (INCHES)		72.67	108.77
10 PERCENT EXCEEDS	2160		4410
50 PERCENT EXCEEDS	647		658
90 PERCENT EXCEEDS	98		80

14306340 EAST FORK LOBSTER CREEK NEAR ALSEA, OR

LOCATION.--Lat 44°14'53", long 123°38'07", in NE 1/4 SE 1/4 sec.22, T.15 S., R.8 W., Benton County, Hydrologic Unit 17100205, on left bank 500 ft upstream from Lobster Creek, and 9 mi south of Alsea.

DRAINAGE AREA.--5.70 mi².

PERIOD OF RECORD.--July 1983 to current year.

REVISED RECORDS.--WDR OR-87-2: 1984(M,P), 1985(M,P), 1986(M,P).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 680 ft above NGVD of 1929, from topographic map.

REMARKS.--Records poor. No regulation or diversion upstream from station. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--19 years (water years 1984-2002), 25.1 ft³/s, 59.78 in/yr, 18,170 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,360 ft³/s Feb. 7, 1996, gage height, 5.37 ft, from rating curve extended above 900 ft³/s on basis of slope-area measurement of peak flow; minimum discharge, 0.17 ft³/s Sept. 27, 28, Oct. 2, 1987.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 22	1215	320	3.73	Dec. 13	1915	342	3.77
Nov. 28	1145	345	3.79	Jan. 25	1000	*384	*3.87

Minimum discharge, 0.41 ft³/s Sept. 13, 14, 16, 24-29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	e8.3	237	26	64	16	15	9.1	3.7	2.0	0.92	0.57
2	1.1	e5.4	163	27	50	14	14	8.6	3.5	1.8	0.90	0.57
3	1.1	e4.5	95	24	52	13	13	8.2	3.4	1.7	0.88	0.54
4	e1.1	e3.8	89	21	48	12	12	7.8	3.2	1.7	0.90	0.52
5	e1.1	e3.4	153	21	40	13	11	7.8	3.2	1.6	0.94	0.53
6	e1.1	e3.1	140	102	40	67	11	7.6	3.0	1.5	0.96	0.52
7	e1.1	e2.9	126	166	99	50	10	7.0	2.9	1.5	0.93	0.51
8	e1.1	e2.7	78	157	133	33	9.7	6.6	3.0	1.5	0.84	0.53
9	e1.1	e2.6	53	99	86	30	15	6.4	3.0	1.4	0.81	0.51
10	e1.3	e2.5	51	65	60	60	27	6.3	2.8	1.3	0.80	0.47
11	e2.0	e2.5	63	45	46	140	25	6.0	2.6	1.2	0.78	0.47
12	e1.9	e2.7	62	40	37	183	29	5.7	2.4	1.2	0.74	0.47
13	e1.5	e30	166	35	31	137	31	5.6	2.3	1.2	0.73	0.44
14	e1.4	e60	216	31	27	97	94	5.3	2.3	1.2	0.69	0.44
15	e1.3	e21	118	27	24	68	56	5.0	2.2	1.2	0.66	0.44
16	e1.3	e19	147	24	22	55	47	4.7	2.2	1.2	0.67	0.44
17	e1.3	e13	168	22	21	46	46	4.8	2.4	1.1	0.69	0.77
18	e1.3	8.9	111	20	20	39	40	4.5	3.0	1.1	0.65	0.82
19	e1.3	10	93	26	21	63	33	4.5	2.5	1.2	0.65	0.60
20	e1.3	16	70	96	21	59	28	4.6	2.2	1.2	0.66	0.55
21	e1.3	34	52	149	23	50	24	4.3	2.1	1.1	0.67	0.52
22	e2.2	219	40	94	26	42	20	4.2	2.0	1.0	0.66	0.49
23	e8.0	116	32	77	32	36	17	4.1	2.0	1.0	0.66	0.44
24	2.7	64	26	92	31	33	15	3.8	2.0	1.0	0.64	0.42
25	2.0	45	22	284	27	30	14	3.7	1.9	1.0	0.64	0.41
26	1.8	33	19	171	23	26	13	3.5	1.7	1.0	0.67	0.41
27	1.9	24	18	101	20	24	13	3.6	1.7	1.0	0.65	0.41
28	2.3	151	22	66	18	21	12	4.3	1.9	0.98	0.60	0.41
29	2.1	210	19	49	---	19	11	6.3	3.7	0.98	0.60	0.42
30	12	178	18	38	---	17	9.7	4.8	2.3	0.97	0.60	0.66
31	17	---	24	45	---	16	---	4.0	---	0.94	0.57	---
TOTAL	79.2	1296.3	2691	2240	1142	1509	715.4	172.7	77.1	38.77	22.76	15.30
MEAN	2.55	43.2	86.8	72.3	40.8	48.7	23.8	5.57	2.57	1.25	0.73	0.51
MAX	17	219	237	284	133	183	94	9.1	3.7	2.0	0.96	0.82
MIN	1.1	2.5	18	20	18	12	9.7	3.5	1.7	0.94	0.57	0.41
AC-FT	157	2570	5340	4440	2270	2990	1420	343	153	77	45	30
CFSM	0.45	7.58	15.2	12.7	7.16	8.54	4.18	0.98	0.45	0.22	0.13	0.09
IN.	0.52	8.46	17.56	14.62	7.45	9.85	4.67	1.13	0.50	0.25	0.15	0.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2002, BY WATER YEAR (WY)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	5.17	39.8	54.2	56.6	56.8	37.9	24.7	14.6	8.06	2.77	1.33	1.38							
MAX	32.4	115	137	116	164	77.1	49.5	28.2	21.3	10.4	2.42	4.51							
(WY)	1998	1985	1997	1999	1999	1997	1993	1985	1983	1983	1983	1997							
MIN	0.39	1.41	17.6	8.87	13.4	11.5	7.26	5.57	1.83	1.25	0.52	0.51							
(WY)	1988	1994	1990	2001	2001	1992	2000	2002	1992	2002	1992	2002							

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1984 - 2002
ANNUAL TOTAL	6164.0	9999.53	
ANNUAL MEAN	16.9	27.4	25.1
HIGHEST ANNUAL MEAN			46.7
LOWEST ANNUAL MEAN			8.28
HIGHEST DAILY MEAN	237	284	817
LOWEST DAILY MEAN	1.0	0.41	0.25
ANNUAL SEVEN-DAY MINIMUM	1.0	0.42	0.29
ANNUAL RUNOFF (AC-FT)	12230	19830	18170
ANNUAL RUNOFF (CFSM)	2.96	4.81	4.40
ANNUAL RUNOFF (INCHES)	40.23	65.26	59.78
10 PERCENT EXCEEDS	32	90	62
50 PERCENT EXCEEDS	6.0	6.3	9.7
90 PERCENT EXCEEDS	1.2	0.66	1.0

e Estimated

ALSEA RIVER BASIN

14306500 ALSEA RIVER NEAR TIDEWATER, OR

LOCATION.--Lat 44°23'10", long 123°49'50", in NW 1/4 NW 1/4 sec.6, T.14 S., R.9 W., Lincoln County, Hydrologic Unit 17100205, on right bank 0.9 mi downstream from Grass Creek, 2.5 mi upstream from Scott Creek, 3.8 mi southeast of Tidewater, and at mile 21.0.

DRAINAGE AREA.--334 mi².

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 48.16 ft above NGVD of 1929. Prior to Nov. 16, 1939, nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharges. Records good. No regulation. Diversion for irrigation upstream from station. Continuous water-quality records for the period October 1979 to September 1981 have been collected at this location.

AVERAGE DISCHARGE.--63 years (water years 1940-2002), 1,476 ft³/s, 60.03 in/yr, 1,069,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 41,800 ft³/s Dec. 22, 1964, gage height, 27.44 ft; minimum discharge, 45 ft³/s Sept. 26, 27, 1965.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood on or about Feb. 3, 1890, reached a stage of 29.5 ft, from floodmark (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 13,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	0300	*14,400	*15.44	Jan. 25	1800	13,900	15.13
Minimum discharge, 59 ft ³ /s Oct. 6, 7.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	598	11000	1810	4010	978	1070	733	369	247	109	73
2	64	409	9570	2020	3430	926	1010	700	352	222	107	72
3	62	310	6150	1950	3200	878	953	678	336	205	105	71
4	62	246	5010	1800	2950	837	904	644	326	196	105	69
5	61	213	7590	1730	2690	843	877	634	321	192	113	68
6	60	191	6770	4140	2530	2290	852	656	313	188	118	68
7	60	172	6370	10500	3770	2650	806	618	299	184	116	70
8	63	157	4670	10600	7050	2010	768	579	298	181	109	70
9	65	147	3640	6820	5250	1750	810	556	302	178	104	70
10	74	140	3380	4750	4000	2630	1140	538	292	171	101	70
11	133	134	3590	3620	3240	5050	1130	519	277	164	98	68
12	122	146	3450	3190	2730	8710	1130	500	269	159	96	67
13	102	207	5290	2780	2370	6450	1130	483	255	156	92	66
14	90	1800	12000	2490	2080	5400	2900	478	245	152	88	65
15	85	1140	7440	2200	1860	4300	2390	460	241	151	84	64
16	80	941	6960	1980	1700	3720	2070	445	239	148	82	67
17	76	731	9060	1860	1550	3380	2100	447	249	145	82	96
18	73	569	6680	1710	1440	3010	1950	431	319	144	81	152
19	71	535	5610	1930	1470	4110	1730	419	288	144	81	124
20	69	722	4580	4280	1360	3910	1530	452	250	145	83	96
21	69	1030	3680	7730	1360	3230	1380	454	234	141	89	84
22	167	7220	3100	6030	1350	2750	1250	428	227	135	89	76
23	573	5860	2610	5110	1460	2400	1140	409	227	129	85	72
24	280	2970	2230	4420	1400	2140	1060	390	223	127	83	69
25	179	2250	1970	10200	1290	1900	988	376	213	126	82	68
26	140	1880	1760	10200	1190	1710	941	365	205	126	82	67
27	121	1570	1620	6780	1110	1550	959	361	197	125	83	66
28	116	3810	1780	4980	1040	1420	877	429	205	122	81	65
29	116	8550	1600	3930	---	1310	811	521	383	118	78	65
30	219	6030	1490	3250	---	1210	769	468	316	115	73	86
31	677	---	1730	3070	---	1140	---	402	---	111	72	---
TOTAL	4197	50678	152380	137860	68880	84592	37425	15573	8270	4847	2851	2284
MEAN	135	1689	4915	4447	2460	2729	1248	502	276	156	92.0	76.1
MAX	677	8550	12000	10600	7050	8710	2900	733	383	247	118	152
MIN	60	134	1490	1710	1040	837	768	361	197	111	72	64
AC-FT	8320	100500	302200	273400	136600	167800	74230	30890	16400	9610	5650	4530
CFSM	0.41	5.06	14.7	13.3	7.37	8.17	3.74	1.50	0.83	0.47	0.28	0.23
IN.	0.47	5.64	16.97	15.35	7.67	9.42	4.17	1.73	0.92	0.54	0.32	0.25

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2002, BY WATER YEAR (WY)

	367	1757	3319	3534	3257	2441	1475	800	409	192	118	128
MEAN	367	1757	3319	3534	3257	2441	1475	800	409	192	118	128
MAX	2521	6058	7419	7874	6909	5144	3203	1848	1053	363	234	452
(WY)	1948	1974	1965	1953	1996	1961	1963	1963	1993	1983	1968	1941
MIN	62.0	108	182	211	607	604	550	331	178	116	65.6	60.1
(WY)	1988	1994	1977	1977	1977	1941	1977	1966	1966	1992	1966	1965

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1940 - 2002

ANNUAL TOTAL	336924	569837	
ANNUAL MEAN	923	1561	1476
HIGHEST ANNUAL MEAN			2541
LOWEST ANNUAL MEAN			431
HIGHEST DAILY MEAN	12000	Dec 14	12000
LOWEST DAILY MEAN	60	Oct 6	60
ANNUAL SEVEN-DAY MINIMUM	62	Oct 2	62
ANNUAL RUNOFF (AC-FT)	668300	1130000	1069000
ANNUAL RUNOFF (CFSM)	2.76	4.67	4.42
ANNUAL RUNOFF (INCHES)	37.53	63.47	60.03
10 PERCENT EXCEEDS	1770	4620	3810
50 PERCENT EXCEEDS	517	519	640
90 PERCENT EXCEEDS	76	73	98

14307620 SIUSLAW RIVER NEAR MAPLETON, OR

LOCATION.--Lat 44°03'45", long 123°52'55", in SW 1/4 NW 1/4 sec.27, T.17 S., R.10 W., Lane County, Hydrologic Unit 17100206, on right bank 250 ft above Shoemaker Creek, 2.5 mi northwest of Mapleton, and at mile 23.7.

DRAINAGE AREA.--588 mi².

PERIOD OF RECORD.--October 1967 to September 1994, October 2001 to September 2002 (discharge), February 1998 to September 2001 (gage height only).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 41 ft above NGVD of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records poor. No regulation or diversions upstream from station. Water-quality records are available in the Environmental Quality Section (EQS) of the Oregon District Office.

AVERAGE DISCHARGE.--28 years (water years 1968-1994, 2002), 2,005 ft³/s, 46.32 in/yr, 1,452,000 ac-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum 49,400 ft³/s Jan. 21, 1972, gage height, 28.45 ft; minimum, 45 ft³/s Aug. 18, 19, 1997.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of December 1964 reached a stage of about 28 ft, from information by local residents (discharge not determined). Flood of Feb. 7, 1996 reached a stage of 30.21 ft, present datum, from floodmark, discharge, 54,800 ft³/s, from rating curve extended above 40,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 15,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	0230	*20,300	17.20	Jan. 25	2030	20,100	17.12
Minimum discharge, 60 ft ³ /s Sept. 5, 6.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	897	11300	2900	6700	1400	1480	1110	556	381	127	72
2	117	742	10700	3030	5740	1340	1410	1070	520	341	121	70
3	115	602	7320	2940	4760	1280	1350	1030	489	310	116	67
4	112	488	5620	2690	4030	1230	1290	979	467	288	118	66
5	110	420	8390	2510	3590	1240	1270	958	456	274	121	62
6	109	364	8860	5680	3310	2780	1260	954	442	263	127	62
7	109	325	8290	12600	4600	3630	1200	914	425	252	128	66
8	113	296	5940	13100	9600	2980	1150	866	416	245	123	69
9	113	276	4500	9320	7930	2510	1270	828	418	236	116	68
10	125	263	3890	6330	5890	2850	1830	805	411	227	113	70
11	190	252	3980	4780	4630	5960	1930	783	395	217	112	77
12	187	263	3950	4100	3840	11300	2030	757	380	209	104	77
13	161	385	7690	3500	3340	8650	2140	728	362	203	101	70
14	151	1950	17100	3120	2950	7580	5840	712	334	196	98	68
15	144	1450	10900	2790	2630	5900	4440	689	347	192	93	68
16	140	1500	9050	2530	2420	4890	3450	668	344	187	90	74
17	138	1280	10900	2380	2230	4500	3290	662	370	184	88	142
18	134	1030	8740	2210	2090	4180	3040	639	525	182	86	221
19	130	910	7830	2350	2040	4340	2680	625	451	182	83	172
20	127	928	6840	5350	1900	4070	2380	665	396	183	85	141
21	125	1190	5370	13100	1900	3570	2140	671	365	176	91	126
22	348	8270	4360	10400	1800	3120	1930	665	348	166	91	118
23	829	7180	3630	8280	1840	2820	1750	624	341	161	90	112
24	468	3950	3060	6740	1820	2580	1600	579	329	158	91	108
25	341	2980	2680	14100	1730	2360	1490	554	309	156	90	99
26	289	2810	2400	16800	1630	2160	1400	532	294	153	90	91
27	259	2650	2220	11500	1540	2000	1380	531	282	151	92	86
28	238	4900	2330	7990	1470	1860	1310	604	293	147	88	83
29	223	10100	2210	6030	---	1740	1220	801	544	140	83	85
30	445	7640	2120	4870	---	1640	1160	709	458	136	76	146
31	950	---	2550	4460	---	1550	---	613	---	130	73	---
TOTAL	7160	66291	194720	198480	97950	108010	60110	23325	12067	6426	3105	2836
MEAN	231	2210	6281	6403	3498	3484	2004	752	402	207	100	94.5
MAX	950	10100	17100	16800	9600	11300	5840	1110	556	381	128	221
MIN	109	252	2120	2210	1470	1230	1150	531	282	130	73	62
AC-FT	14200	131500	386200	393700	194300	214200	119200	46270	23930	12750	6160	5630
CFSM	0.39	3.76	10.7	10.9	5.95	5.93	3.41	1.28	0.68	0.35	0.17	0.16
IN.	0.45	4.19	12.32	12.56	6.20	6.83	3.80	1.48	0.76	0.41	0.20	0.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2002, BY WATER YEAR (WY)

	374	2245	4700	4966	4257	3384	2161	1061	596	269	157	171
MEAN	374	2245	4700	4966	4257	3384	2161	1061	596	269	157	171
MAX	1219	7819	9787	10060	9084	6819	4445	2102	1466	628	321	356
(WY)	1969	1974	1982	1970	1986	1974	1982	1984	1993	1983	1968	1971
MIN	64.3	173	261	300	876	1119	686	541	280	127	77.9	86.8
(WY)	1988	1994	1977	1977	1977	1992	1977	1985	1992	1977	1973	1987

SUMMARY STATISTICS

FOR 2002 WATER YEAR

WATER YEARS 1968 - 2002

ANNUAL TOTAL	780480	
ANNUAL MEAN	2138	2005
HIGHEST ANNUAL MEAN		3711
LOWEST ANNUAL MEAN		576
HIGHEST DAILY MEAN	17100	45900
LOWEST DAILY MEAN	62	45
ANNUAL SEVEN-DAY MINIMUM	66	47
ANNUAL RUNOFF (AC-FT)	1548000	1452000
ANNUAL RUNOFF (CFSM)	3.64	3.41
ANNUAL RUNOFF (INCHES)	49.38	46.32
10 PERCENT EXCEEDS	6150	5250
50 PERCENT EXCEEDS	783	874
90 PERCENT EXCEEDS	93	128

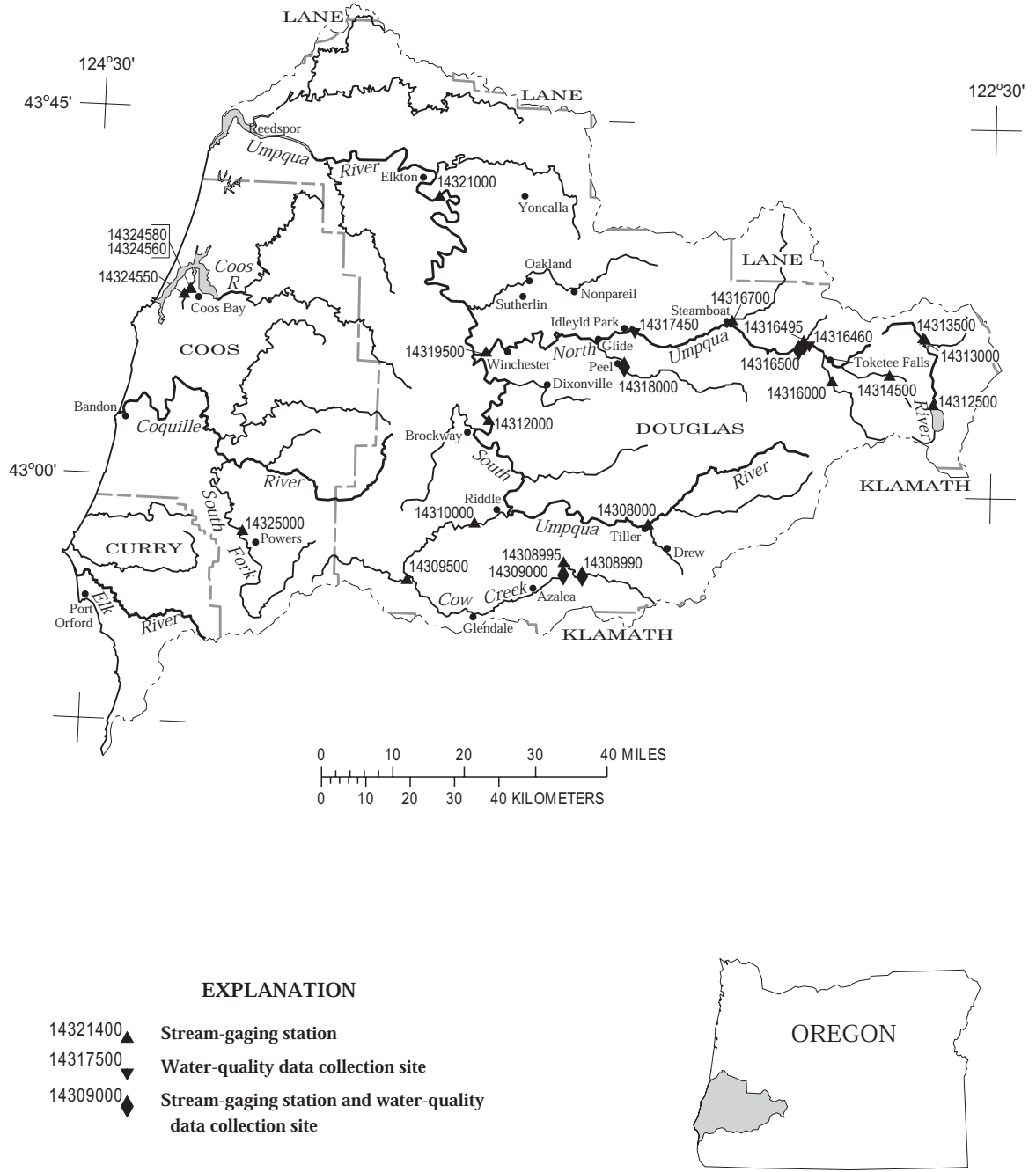


Figure 29. Location of surface-water and water-quality stations in the Umpqua, Coos and Coquille River Basins.

PACIFIC OCEAN

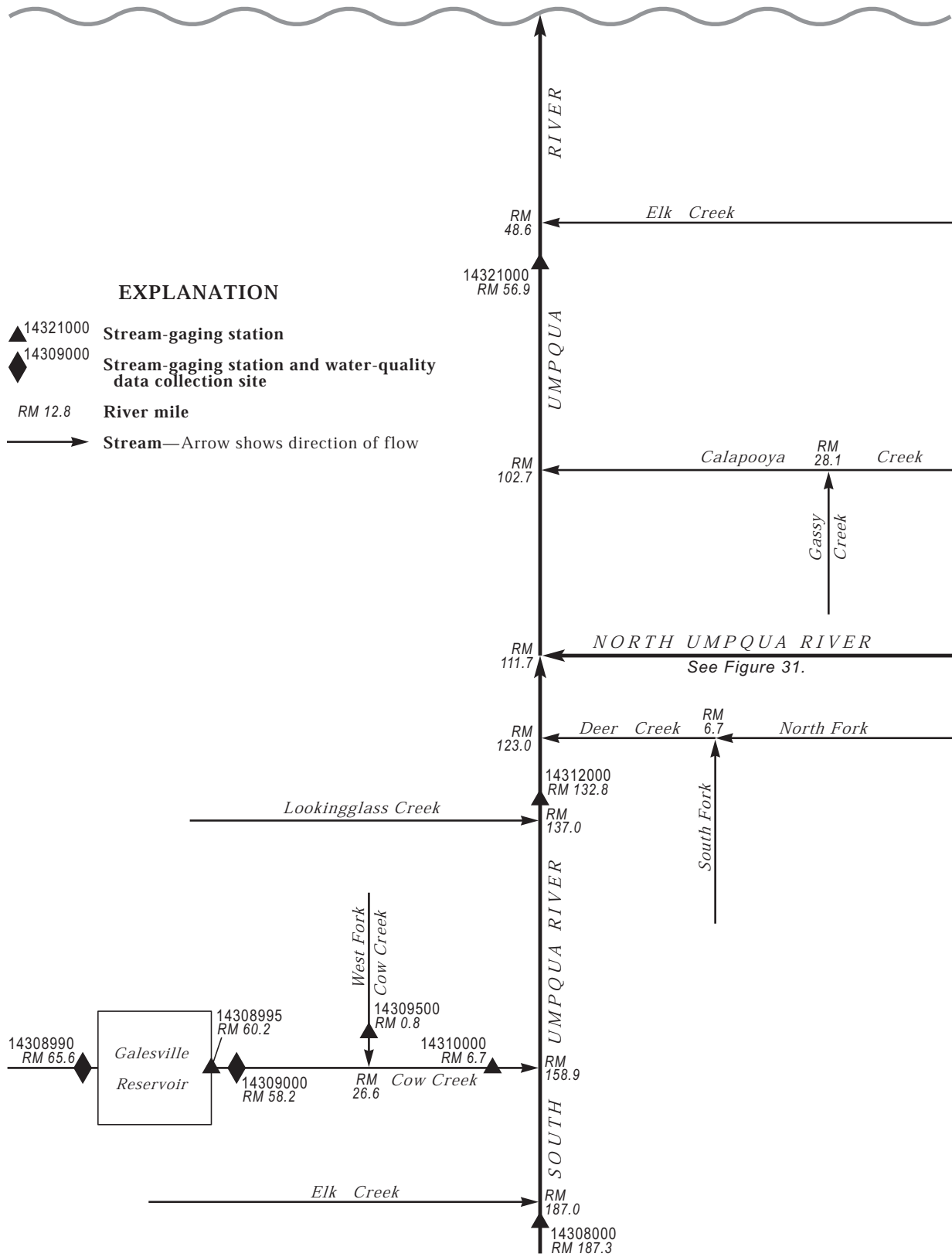


Figure 30. Schematic diagram showing gaging stations in the Umpqua and the South Fork Umpqua River Basins.

UMPQUA RIVER BASIN

14308000 SOUTH UMPQUA RIVER AT TILLER, OR

LOCATION.--Lat 42°55'50", long 122°56'50", in NE 1/4 sec.33, T.30 S., R.2 W., Douglas County, Hydrologic Unit 17100302, Umpqua National Forest, on left bank 0.3 mi upstream from bridge on State Highway 227 at Tiller, 0.3 mi upstream from Elk Creek, and at mile 187.31.

DRAINAGE AREA.--449 mi².

PERIOD OF RECORD.--October 1910 to December 1911, October 1939 to current year. Monthly discharge only for some periods, published in WSP 1318. Prior to December 1911, published as South Fork of Umpqua River at Tiller.

REVISED RECORDS.--WSP 1448: 1911(M), 1912, drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 991.8 ft above NGVD of 1929 (river-profile survey). Prior to Oct. 1, 1939, nonrecording gage at site 0.2 mi downstream at different datum.

REMARKS.--Records good. No regulation. Small diversions for irrigation upstream from station. National Weather Service telephone telemetry at station.

AVERAGE DISCHARGE.--64 years, (water years 1911, 1940-2002), 1,025 ft³/s, 31.02 in/yr, 742,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 60,200 ft³/s Dec. 22, 1964, gage height, 25.72 ft; minimum discharge observed, 20 ft³/s Sept. 3, 4, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	0200	*14,600	*12.51	Jan. 8	1000	8,600	9.53
Dec. 17	0700	9,470	10.01				

Minimum discharge, 33 ft³/s Sept. 15-17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	160	1440	3070	883	1120	1200	722	465	123	54	38
2	43	123	1590	3590	915	988	1260	725	426	118	54	37
3	42	97	1170	3020	900	881	1390	734	389	112	53	37
4	41	81	892	2200	948	803	1470	709	358	108	52	37
5	40	74	1100	1730	1010	767	1580	684	344	105	53	37
6	39	73	2880	3430	999	807	1460	656	333	101	54	37
7	39	71	2730	3800	2020	1080	1300	620	311	98	54	41
8	39	67	1640	6640	3710	966	1170	577	287	95	52	46
9	40	64	1460	4440	2400	866	1150	547	269	92	51	43
10	40	62	1190	2850	1840	826	1380	511	248	89	50	40
11	55	60	1110	2120	1650	959	1330	482	e240	85	49	38
12	89	64	1330	1910	1460	1860	1310	479	e225	82	48	37
13	62	95	2910	1670	1400	1810	1430	516	e210	81	47	36
14	51	145	8750	1410	1370	1610	4670	515	e200	81	46	35
15	48	129	3300	1180	1270	1470	3300	511	e210	79	44	34
16	46	208	4050	1010	1260	1330	2320	494	e230	77	43	34
17	44	501	7320	912	1280	1200	2170	493	e250	76	43	38
18	42	247	3830	811	1150	1070	2060	511	309	74	43	139
19	42	168	2630	800	1650	1010	1830	503	290	72	43	88
20	42	191	2420	822	3300	1220	1630	479	224	72	43	60
21	42	494	1970	1360	3500	1690	1430	480	199	71	43	51
22	48	1760	1560	1440	2950	1980	1300	494	190	69	44	47
23	278	1340	1300	1190	3000	2370	1190	428	178	67	43	44
24	182	714	1100	1060	2660	3230	1070	400	166	65	42	42
25	103	792	973	1590	2090	2620	998	403	156	62	41	40
26	77	768	918	3650	1700	2040	960	429	147	61	41	39
27	66	550	995	2250	1460	1710	928	461	139	60	41	38
28	64	741	1660	1620	1290	1470	847	516	133	59	41	38
29	67	1640	1710	1260	---	1320	777	535	130	57	40	38
30	79	1030	1900	1040	---	1250	753	542	133	56	38	42
31	222	---	3550	908	---	1210	---	509	---	55	38	---
TOTAL	2157	12509	71378	64783	50065	43533	45663	16665	7389	2502	1428	1351
MEAN	69.6	417	2303	2090	1788	1404	1522	538	246	80.7	46.1	45.0
MAX	278	1760	8750	6640	3710	3230	4670	734	465	123	54	139
MIN	39	60	892	800	883	767	753	400	130	55	38	34
AC-FT	4280	24810	141600	128500	99300	86350	90570	33060	14660	4960	2830	2680
CFSM	0.15	0.93	5.13	4.65	3.98	3.13	3.39	1.20	0.55	0.18	0.10	0.10
IN.	0.18	1.04	5.91	5.37	4.15	3.61	3.78	1.38	0.61	0.21	0.12	0.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 2002, BY WATER YEAR (WY)

	193	1039	2021	2085	1989	1711	1411	1066	514	155	77.1	74.8
MEAN	193	1039	2021	2085	1989	1711	1411	1066	514	155	77.1	74.8
MAX	1791	3976	7480	4513	4907	4776	2756	2093	1643	301	206	364
(WY)	1951	1974	1965	1972	1986	1972	1993	1963	1953	1953	1976	1986
MIN	34.5	48.2	66.6	89.7	95.1	328	433	231	108	49.5	29.9	38.9
(WY)	1988	1940	1977	1977	1977	1992	1968	1992	1992	1940	1940	1992

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1911 - 2002
ANNUAL TOTAL	182320	319423	
ANNUAL MEAN	500	875	1025
HIGHEST ANNUAL MEAN			1762
LOWEST ANNUAL MEAN			268
HIGHEST DAILY MEAN	8750	Dec 14	36500
LOWEST DAILY MEAN	33	Sep 24	20
ANNUAL SEVEN-DAY MINIMUM	35	Sep 18	26
ANNUAL RUNOFF (AC-FT)	361600	633600	742500
ANNUAL RUNOFF (CFSM)	1.11	1.95	2.28
ANNUAL RUNOFF (INCHES)	15.11	26.46	31.02
10 PERCENT EXCEEDS	1130	2140	2420
50 PERCENT EXCEEDS	241	494	506
90 PERCENT EXCEEDS	42	42	58

e Estimated

UMPQUA RIVER BASIN

14308990 COW CREEK ABOVE GALESVILLE RESERVOIR, NEAR AZALEA, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

TURBIDITY: October 1999 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Records good except for the period Oct. 25 to Nov. 19, which are fair. The probe was checked using a polymer bead standard. Water-quality monitor located 600 ft downstream from water discharge site.

EXTREMES FOR PERIOD OF RECORD.--Maximum recorded, 90 NTU Nov. 28, 2001; minimum, <1 many days each year.

EXTREMES FOR CURRENT YEAR.--

TURBIDITY: Maximum recorded, 90 NTU Nov. 28; minimum, <1 many days during year.

TURBIDITY (NTU), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
1	2	<1	<1	<1	<1	<1	42	5	19	5	4	4
2	3	<1	1	2	<1	<1	19	8	12	14	5	8
3	4	<1	1	<1	<1	<1	13	7	10	9	4	5
4	3	<1	<1	1	<1	<1	57	5	6	7	3	3
5	4	<1	<1	2	<1	<1	22	5	9	4	2	3
6	1	<1	<1	<1	<1	<1	26	9	12	26	4	15
7	4	<1	<1	2	<1	<1	10	6	7	12	7	10
8	2	<1	<1	2	<1	<1	7	4	4	65	12	25
9	7	<1	<1	22	<1	<1	6	4	4	21	8	11
10	4	<1	<1	<1	<1	<1	30	3	4	8	5	6
11	5	<1	<1	<1	<1	<1	8	4	5	6	4	4
12	2	<1	<1	2	<1	<1	10	6	8	16	3	4
13	2	<1	<1	2	<1	<1	86	5	6	5	2	3
14	3	<1	<1	1	<1	<1	90	13	28	4	2	2
15	2	<1	<1	1	<1	<1	14	8	10	5	2	2
16	2	<1	<1	11	<1	4	55	8	9	7	2	2
17	3	<1	<1	12	<1	1	72	14	26	4	2	2
18	2	<1	<1	1	<1	<1	15	8	10	8	1	2
19	2	<1	<1	1	<1	<1	10	6	8	2	1	2
20	3	<1	<1	4	<1	<1	8	5	6	3	2	2
21	2	<1	<1	12	2	3	10	4	5	11	2	8
22	1	<1	<1	24	8	14	6	4	4	10	4	5
23	<1	<1	<1	10	2	3	6	3	4	4	3	3
24	4	<1	<1	13	1	2	8	3	3	3	3	3
25	2	<1	<1	3	2	2	4	2	3	31	3	4
26	2	<1	<1	3	1	2	10	2	2	31	8	11
27	1	<1	<1	2	<1	1	4	2	2	8	4	6
28	<1	<1	<1	---	---	---	6	3	4	5	3	4
29	2	<1	<1	51	10	16	10	3	6	4	3	3
30	<1	<1	<1	17	6	8	6	4	5	4	2	2
31	2	<1	<1	---	---	---	9	5	6	4	2	2
MAX	7	<1	1	---	---	---	90	14	28	65	12	25
MIN	<1	<1	<1	---	---	---	4	2	2	2	1	2

14308990 COW CREEK ABOVE GALESVILLE RESERVOIR, NEAR AZALEA, OR--Continued

TURBIDITY (NTU), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
FEBRUARY			MARCH			APRIL			MAY			
1	3	2	2	3	1	2	2	<1	1	2	<1	1
2	3	2	2	2	1	1	2	<1	1	2	<1	1
3	4	2	2	3	1	1	2	<1	1	2	<1	<1
4	4	2	2	2	<1	1	2	<1	1	1	<1	<1
5	3	2	2	2	1	1	2	1	1	2	<1	<1
6	3	1	2	2	<1	1	2	<1	1	2	<1	<1
7	74	2	8	3	1	2	2	<1	1	2	<1	<1
8	36	9	14	2	1	1	3	<1	1	2	<1	<1
9	9	5	7	2	<1	1	2	<1	1	1	<1	<1
10	7	4	4	3	1	1	2	1	1	2	<1	<1
11	4	3	3	2	1	1	2	<1	1	1	<1	<1
12	6	2	3	3	1	2	2	<1	1	3	<1	<1
13	3	2	2	2	1	2	2	<1	1	3	<1	<1
14	4	2	2	3	1	2	5	1	2	1	<1	<1
15	3	1	2	3	2	2	3	1	1	1	<1	<1
16	3	1	2	2	2	2	3	<1	1	2	<1	<1
17	3	1	1	2	2	2	3	<1	1	2	<1	<1
18	2	1	1	16	2	2	2	1	2	2	<1	<1
19	7	1	2	5	2	2	2	1	1	2	<1	<1
20	14	5	6	7	2	3	2	<1	1	2	<1	<1
21	5	4	5	4	2	3	2	<1	1	1	<1	<1
22	5	3	3	5	2	3	2	<1	1	2	<1	<1
23	4	3	4	4	2	3	2	<1	1	1	<1	<1
24	4	2	3	4	3	3	2	<1	<1	1	<1	<1
25	3	2	2	3	2	2	2	<1	<1	3	<1	<1
26	4	1	2	4	2	2	1	<1	<1	3	<1	<1
27	3	2	2	2	2	2	2	<1	<1	2	<1	<1
28	22	1	2	2	1	2	2	<1	<1	1	<1	<1
29	---	---	---	3	1	2	2	<1	<1	1	<1	<1
30	---	---	---	3	1	1	3	<1	<1	1	<1	1
31	---	---	---	2	1	1	---	---	---	2	<1	1
MAX	74	9	14	16	3	3	5	1	2	3	<1	1
MIN	2	1	1	2	<1	1	1	<1	<1	1	<1	<1

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	1	<1	1	2	<1	<1	25	1	2	2	<1	<1
2	1	<1	<1	1	<1	<1	2	1	2	2	<1	<1
3	2	<1	1	2	<1	<1	2	1	2	3	<1	<1
4	1	<1	1	2	<1	1	3	1	2	2	<1	<1
5	2	<1	1	2	<1	1	3	1	2	1	<1	<1
6	17	<1	1	3	1	1	3	1	2	1	<1	<1
7	1	<1	<1	3	1	1	6	1	2	2	<1	<1
8	1	<1	<1	3	1	1	3	1	2	<1	<1	<1
9	1	<1	<1	2	<1	1	3	1	2	3	<1	<1
10	2	<1	<1	6	<1	<1	4	1	2	30	<1	<1
11	1	<1	1	2	<1	<1	6	2	2	1	<1	<1
12	2	<1	<1	2	<1	<1	4	2	2	2	<1	<1
13	1	<1	<1	2	<1	<1	46	1	2	5	<1	<1
14	2	<1	<1	2	<1	<1	4	<1	1	2	<1	<1
15	1	<1	<1	4	<1	<1	2	<1	1	2	<1	<1
16	1	<1	<1	2	<1	<1	3	<1	1	1	<1	<1
17	1	<1	<1	4	<1	1	2	<1	1	4	<1	<1
18	9	<1	<1	2	<1	1	2	<1	1	3	<1	<1
19	2	<1	1	2	<1	<1	2	<1	1	2	<1	<1
20	2	<1	1	2	<1	<1	2	<1	1	2	<1	<1
21	4	<1	1	2	<1	1	2	<1	1	2	<1	<1
22	3	1	1	3	<1	1	3	<1	1	3	<1	<1
23	2	1	1	4	<1	1	4	<1	1	3	<1	<1
24	2	1	1	2	<1	1	4	<1	1	3	<1	1
25	2	<1	1	4	1	1	2	<1	1	3	1	2
26	2	<1	<1	3	<1	1	2	<1	1	2	1	2
27	1	<1	<1	15	<1	1	2	<1	<1	2	1	2
28	1	<1	<1	3	<1	1	2	<1	<1	4	1	2
29	1	<1	<1	12	<1	1	2	<1	<1	2	1	2
30	1	<1	<1	14	<1	2	2	<1	<1	4	1	2
31	---	---	---	9	1	2	1	<1	<1	---	---	---
MAX	17	1	1	15	1	2	46	2	2	30	1	2
MIN	1	<1	<1	1	<1	<1	1	<1	<1	<1	<1	<1

UMPQUA RIVER BASIN

14308995 GALESVILLE RESERVOIR NEAR AZALEA, OR

LOCATION.--Lat 42°50'56", long 123°10'40", in NE 1/4 sec.28, T.31 S., R.4 W., Douglas County, Hydrologic Unit 17100302, on the upstream face of Galesville dam to the right side of the spillway section, 1.2 mi downstream from McGinnis Creek, 5.6 mi northeast of Azalea, and at mile 60.2.

DRAINAGE AREA.--74.3 mi².

PERIOD OF RECORD.--October 1985 to current year.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (levels by Douglas County).

REMARKS.--Reservoir is formed by a roller compacted concrete dam; storage began Oct. 7, 1985. Capacity, 42,220 acre-ft between elevations 1,780.0 ft (bottom of evacuation outlet) and 1,881.5 ft (crest of spillway). Dead storage, 1,800 acre-ft below elevation 1,780.0 ft. Reservoir is used for irrigation, power generation, flood control, and recreation. Figures given herein represent total contents.

COOPERATION.--Capacity table furnished by Douglas County Public Works Department.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 43,230 acre-ft Jan. 2, 3, 1997, elevation, 1,883.62 ft; minimum contents, 7,240 acre-ft Jan. 9, 10, 1991, elevation, 1,805.03 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 29,860 acre-ft Apr. 6, elevation, 1,860.72 ft; minimum contents, 8,170 acre-ft Nov. 21, elevation, 1,808.25 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)

1,780	1,800	1,820	11,960	1,860	29,480
1,790	3,590	1,830	15,660	1,870	34,970
1,800	5,890	1,840	19,820	1,880	40,930
1,810	8,700	1,850	24,420	1,885	44,130

ELEVATION, in FT (NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1821.60	1812.18	1811.89	1837.91	1845.96	1856.18	1860.64	1860.39	1859.63	1858.59	1856.72	1854.21
2	1821.43	1811.80	1812.85	---	1845.99	1856.25	1860.67	1860.37	1859.60	1858.54	1856.64	1854.13
3	1821.26	1811.42	1813.53	---	1846.09	1856.30	1860.69	1860.33	1859.58	1858.48	1856.56	1854.06
4	1821.08	1811.04	1813.82	1840.67	1846.18	1856.33	1860.71	1860.31	1859.56	1858.42	1856.48	1853.98
5	1820.88	1810.68	1814.50	1841.11	1846.28	1856.36	1860.71	1860.28	1859.53	1858.38	1856.42	1853.90
6	1820.68	1810.34	---	1842.89	1846.36	1856.42	1860.71	1860.23	1859.50	1858.33	1856.35	1853.83
7	1820.47	1810.06	---	1844.35	1847.71	1856.54	1860.69	1860.16	1859.46	1858.29	1856.27	1853.75
8	1820.26	1809.82	---	1847.07	1849.38	1856.57	1860.66	1860.09	1859.44	1858.23	1856.18	1853.68
9	1820.03	1809.60	---	1847.41	1850.20	1856.60	1860.63	1860.04	1859.41	1858.20	1856.10	1853.61
10	1819.81	1809.36	---	1846.88	1850.63	1856.63	1860.60	1860.00	1859.39	1858.14	1856.01	1853.53
11	1819.59	1809.13	1817.57	1846.13	1850.95	1856.71	1860.57	1859.96	1859.37	1858.08	1855.92	1853.46
12	1819.33	1808.96	1818.10	1845.62	1851.32	1856.89	1860.55	1859.91	1859.34	1858.03	1855.83	1853.38
13	1819.05	1808.84	1819.06	1845.35	1851.63	1857.08	1860.57	1859.85	1859.31	1857.96	1855.75	1853.31
14	1818.76	1808.64	1822.79	1845.14	1851.89	1857.23	1860.65	1859.80	1859.27	1857.90	1855.65	1853.23
15	1818.44	1808.57	1823.88	1844.97	1852.09	1857.41	1860.67	1859.77	1859.24	1857.84	1855.55	1853.16
16	1818.09	1808.59	1825.09	1844.90	1852.27	1857.59	1860.67	1859.75	1859.21	1857.78	1855.46	1853.09
17	1817.73	1808.49	1828.85	1844.86	1852.43	1857.76	1860.69	1859.72	1859.14	1857.73	1855.37	1853.03
18	1817.35	1808.43	1830.37	1844.83	1852.57	1857.87	1860.71	1859.71	1859.11	1857.67	1855.28	1852.97
19	1816.99	1808.41	1831.37	1844.86	1852.92	1857.98	1860.71	1859.72	1859.09	1857.61	1855.20	1852.90
20	1816.62	1808.39	1832.18	1844.86	1853.48	1858.16	1860.70	1859.77	1859.05	1857.51	1855.12	1852.83
21	1816.25	1808.28	1832.70	1845.04	1853.97	1858.40	1860.67	1859.79	1859.02	1857.46	1855.04	1852.75
22	1815.91	1808.62	1833.17	1844.96	1854.40	1858.71	1860.64	1859.78	1858.99	1857.40	1854.97	1852.68
23	1815.57	1808.62	1833.52	1844.89	1854.86	1859.08	1860.61	1859.77	1858.95	1857.34	1854.89	1852.60
24	1815.18	1808.60	1833.78	1844.92	1855.24	1859.46	1860.58	1859.76	1858.92	1857.27	1854.81	1852.52
25	1814.82	1808.58	1833.92	1845.30	1855.55	1859.78	1860.54	1859.74	1858.87	1857.21	1854.74	1852.44
26	1814.43	1808.52	1834.02	1846.28	1855.77	1860.03	1860.52	1859.72	1858.83	1857.14	1854.67	1852.35
27	1814.06	1808.44	1834.15	1846.51	1855.95	1860.21	1860.52	1859.72	1858.79	1857.07	1854.59	1852.27
28	1813.66	1809.59	1834.53	1846.52	1856.09	1860.35	1860.50	1859.71	1858.73	1857.00	1854.52	1852.19
29	1813.27	1810.55	1835.26	1846.36	---	1860.46	1860.48	1859.69	1858.69	1856.94	1854.44	1852.12
30	1812.92	1810.72	1836.00	1846.11	---	1860.54	1860.41	1859.67	1858.64	1856.87	1854.36	1852.06
31	1812.55	---	1837.04	1845.97	---	1860.60	---	1859.65	---	1856.79	1854.29	---
MAX	1821.60	1812.18	---	---	1856.09	1860.60	1860.71	1860.39	1859.63	1858.59	1856.72	1854.21
MIN	1812.55	1808.28	---	---	1845.96	1856.18	1860.41	1859.65	1858.64	1856.79	1854.29	1852.06
(†)	9490	8920	18540	22520	27440	29790	29690	29290	28760	27800	26530	25430
(‡)	-3080	-570	+9620	+3980	+4920	+2350	-100	-400	-530	-960	-1270	-1100
CAL YR 2001	MAX	---	MIN	---	AC-FT†	-10						
WTR YR 2002	MAX	---	MIN	---	AC-FT†	+12860						

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

‡ Change in contents, in acre-feet.

UMPQUA RIVER BASIN

14309000 COW CREEK NEAR AZALEA, OR

LOCATION.--Lat 42°49'30", long 123°10'40", in N-1/2 sec.4, T.32 S., R.4 W., Douglas County, Hydrologic Unit 17100302, on right bank 0.8 mi upstream from Whitehorse Creek, 4.5 mi northeast of Azalea, and at mile 58.2.

DRAINAGE AREA.--78.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1926 to September 1928 (no winter records), April 1929 to December 1931, April 1932 to current year.

REVISED RECORDS.--WSP 984: 1933-36. WSP 1154: 1946(M), 1948(M). WSP 1448: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,694.32 ft above NGVD of 1929 (Douglas County Road Department bench mark). Prior to July 19, 1949, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since Oct. 7, 1985 by Galesville Reservoir (station 14308995). Diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--72 years (water years 1930-31, 1933-2002), 107 ft³/s, 18.63 in/yr, 77,520 acre-ft/yr, adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,600 ft³/s Jan. 15, 1974, gage height, 16.40 ft, from high-water mark in well; minimum discharge, 1.1 ft³/s Aug. 12, 1981, but may have been less during period of no gage-height record Sept. 4-30, 1970.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 423 ft³/s Jan. 9, 10, gage height, 3.58 ft; minimum discharge, 19 ft³/s Nov. 19, June 22, July 5-18, 20-27, 29-31.

DISCHARGE, in CFS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	64	77	73	114	70	72	49	26	22	22	23
2	30	64	74	69	93	70	72	47	25	22	22	23
3	31	62	73	72	77	70	72	47	24	21	22	24
4	32	62	72	69	72	70	72	43	24	21	21	24
5	34	61	78	69	70	70	72	41	23	21	22	24
6	36	55	73	80	70	70	72	41	23	20	22	23
7	38	48	69	99	76	70	72	51	23	21	23	24
8	39	41	67	213	81	70	68	47	24	20	26	23
9	42	40	68	358	87	72	71	44	24	21	26	23
10	44	39	68	411	111	70	71	41	24	20	26	23
11	45	40	69	385	108	70	69	41	24	23	26	23
12	47	41	72	293	73	71	63	41	23	20	26	23
13	49	39	86	211	72	71	58	41	22	22	26	23
14	52	33	99	178	71	71	64	40	22	20	26	23
15	55	28	84	156	71	72	68	34	22	21	26	24
16	58	42	80	123	71	72	70	32	22	20	25	23
17	61	46	82	108	71	73	70	31	22	20	23	24
18	62	24	70	96	71	72	70	29	25	20	23	24
19	61	22	67	96	72	72	70	30	23	21	24	24
20	61	31	67	99	76	75	70	36	22	29	24	24
21	61	64	64	147	72	75	70	34	21	20	23	24
22	62	68	63	174	73	75	65	36	20	20	24	24
23	63	58	64	138	74	75	59	31	21	20	23	24
24	65	47	64	113	72	75	58	29	22	20	23	24
25	63	61	64	138	71	73	58	28	22	20	23	24
26	61	52	65	191	70	72	54	28	22	21	24	24
27	63	38	67	185	70	72	55	28	22	20	23	24
28	66	67	67	181	70	72	55	29	22	21	24	24
29	65	76	69	178	---	72	53	28	22	21	23	24
30	65	70	68	177	---	72	58	26	22	21	23	24
31	66	---	72	143	---	72	---	26	---	21	24	---
TOTAL	1605	1483	2222	5023	2179	2226	1971	1129	693	650	738	709
MEAN	51.77	49.43	71.68	162.0	77.82	71.81	65.70	36.42	23.10	20.97	23.81	23.63
MAX	66	76	99	411	114	75	72	51	32	29	26	24
MIN	28	22	63	69	70	70	53	26	20	20	21	23
AC-FT	3180	2940	4410	9960	4320	4420	3910	2240	1370	1290	1460	1410
MEAN†	1.63	39.8	228	227	166	110	64.0	29.9	14.1	5.37	3.09	5.21
CFSTM†	0.02	0.51	2.92	2.91	2.13	1.41	0.82	0.38	0.18	0.07	0.04	0.07
IN.†	0.02	0.57	3.37	3.35	2.22	1.63	0.92	0.44	0.20	0.08	0.04	0.07
AC-FT†	100	2370	14030	13940	9240	6770	3810	1840	840	330	190	310

CAL YR 2001 TOTAL 13653 MEAN 37.41 MAX 99 MIN 19 AC-FT 27080 MEAN† 37.4 CFSTM† 0.48 IN.† 6.51 AC-FT† 27070
WTR YR 2002 TOTAL 20628 MEAN 56.52 MAX 411 MIN 20 AC-FT 40920 MEAN† 73.3 CFSTM† 0.94 IN.† 12.75 AC-FT† 53050

† Adjusted for change in contents, in Galesville Reservoir.

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: November 1985 to current year.
 TURBIDITY: October 1999 to current year.

INSTRUMENTATION.--Water-quality monitor since November 1985.

REMARKS.--Dissolved oxygen and turbidity records good. The probe was checked using a polymer bead standard.
 Water-quality monitor located 1.9 mi upstream from water-discharge site, 1000 ft downstream from Galesville Dam, and at mile 60.1.

EXTREMES FOR PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: Maximum recorded, 15.1 mg/L Feb. 7, 1989, Nov. 17, 20, 1996, caused by operation of bypass valve at dam; minimum, 0.9 mg/L July 30, 1988.
 TURBIDITY: Maximum recorded, 89 NTU May 1, 2002, but may have been higher during period of missing record; minimum, <1 NTU many days each year.

EXTREMES FOR CURRENT YEAR.--

DISSOLVED OXYGEN: Maximum recorded, 14.5 mg/L Jan. 25, but may have been higher during periods of missing record; minimum recorded, 6.6 mg/L Aug. 9, but may have been lower during periods of missing record.
 TURBIDITY: Maximum recorded, 89 NTU May 1, but may have been higher during period of missing record; minimum, <1 NTU many days during the year.

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	14.5	10.8	11.9
26	---	---	---	---	---	---	---	---	---	12.0	11.1	11.7
27	---	---	---	---	---	---	---	---	---	11.8	11.4	11.6
28	---	---	---	---	---	---	---	---	---	12.0	11.4	11.7
29	---	---	---	---	---	---	---	---	---	12.2	11.0	11.9
30	---	---	---	---	---	---	---	---	---	12.1	11.5	11.9
31	---	---	---	---	---	---	---	---	---	12.1	11.4	11.9
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	12.0	11.9	12.0	11.1	10.6	10.8	11.1	10.2	10.8	10.7	10.2	10.4
2	12.3	11.7	12.0	11.1	10.5	10.8	11.1	10.5	10.8	10.7	10.2	10.5
3	12.3	11.9	12.1	11.1	10.7	11.0	11.1	10.5	10.8	11.1	10.4	10.7
4	12.1	11.8	11.9	11.2	10.7	11.0	10.9	8.9	10.5	10.7	10.2	10.5
5	12.1	11.7	11.9	11.1	10.6	10.9	10.6	9.9	10.4	10.6	9.6	10.1
6	12.4	11.1	11.6	11.5	9.9	10.8	10.5	10.2	10.3	10.9	10.4	10.6
7	11.7	11.0	11.4	10.8	10.1	10.5	10.7	10.0	10.4	11.1	10.2	10.6
8	11.6	11.1	11.4	11.1	10.3	10.8	10.6	10.1	10.4	10.5	9.4	10.1
9	11.6	11.2	11.4	11.3	10.7	10.9	10.7	10.1	10.4	10.7	9.6	10.1
10	11.7	11.2	11.5	11.2	10.7	10.9	10.7	10.1	10.4	10.1	9.7	9.9
11	12.4	11.1	11.7	11.1	10.2	10.7	10.8	10.3	10.5	10.0	9.6	9.9
12	11.7	11.2	11.4	10.9	10.4	10.7	10.8	10.2	10.4	10.2	9.4	9.9
13	11.7	11.1	11.4	11.1	10.6	10.9	10.6	10.3	10.5	10.3	9.6	10
14	11.5	11.1	11.3	11.0	10.6	10.8	11.0	10.3	10.6	10.3	9.8	10.0
15	11.6	11.0	11.4	10.9	10.6	10.8	11.0	10.2	10.5	10.2	9.6	9.9
16	12.3	10.9	11.4	10.8	10.5	10.6	10.7	10.1	10.5	10.4	9.3	9.9
17	11.6	10.8	11.2	10.9	10.5	10.7	10.6	10.2	10.3	10.4	9.7	10.1
18	11.9	11.0	11.3	11.1	10.7	10.9	10.5	10.1	10.4	10.2	9.5	9.9
19	12.1	10.0	11.1	12.1	10.6	10.9	10.6	10.0	10.4	10.0	7.8	9.6
20	10.1	9.6	9.8	11.3	10.7	11.0	10.5	9.8	10.3	10.4	9.6	10
21	10.3	9.7	10.0	11.3	10.7	11.1	10.5	10	10.3	10.3	8.9	9.8
22	10.5	9.9	10.2	11.4	10.5	11.2	10.9	10.0	10.3	10.6	9.1	10
23	10.7	9.6	10.1	11.3	10.6	11.1	10.6	10.2	10.4	10.4	9.2	9.8
24	10.7	10.1	10.3	11.3	10.8	11.0	10.5	10	10.3	10.4	9.2	9.7
25	10.6	10.2	10.5	11.5	10.7	11.1	10.9	10.0	10.4	10.4	9.4	9.8
26	10.8	10.3	10.6	11.4	10.3	11.0	10.9	10.2	10.5	10.4	9.5	9.9
27	10.8	10.4	10.6	11.4	10.3	10.9	10.6	10.2	10.4	10.3	9.3	9.7
28	11.0	10.3	10.7	11.4	10.2	11.0	10.4	10.1	10.3	10.2	9.0	9.6
29	---	---	---	11.3	10.4	10.9	10.7	10.1	10.4	10.3	9.0	9.5
30	---	---	---	11.2	10.5	10.9	11.1	10.2	10.5	9.7	9.0	9.3
31	---	---	---	11.1	10.3	10.8	---	---	---	9.6	8.9	9.3
MONTH	12.4	9.6	11.2	12.1	9.9	10.9	11.1	8.9	10.4	11.1	7.8	10.

UMPQUA RIVER BASIN

14309000 COW CREEK NEAR AZALEA, OR--Continued

TURBIDITY (NTU), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	FEBRUARY			MARCH			APRIL			MAY		
1	4	4	4	4	3	3	1	<1	<1	89	6	33
2	4	4	4	4	3	3	1	<1	<1	69	9	22
3	4	4	4	4	3	3	2	<1	<1	81	4	10
4	4	4	4	3	2	3	6	<1	<1	10	4	5
5	4	4	4	3	2	2	1	<1	<1	26	3	7
6	5	4	5	3	2	3	1	<1	<1	8	2	4
7	5	5	5	3	2	3	2	<1	<1	9	2	3
8	5	5	5	3	2	2	3	<1	<1	11	3	4
9	5	5	5	29	2	2	3	<1	<1	32	5	8
10	5	5	5	11	2	2	2	<1	<1	8	4	5
11	6	5	5	4	2	2	1	<1	<1	24	3	4
12	5	5	5	2	2	2	69	<1	<1	20	4	9
13	5	4	5	9	2	2	18	<1	<1	12	3	6
14	5	4	5	2	2	2	47	<1	1	8	2	3
15	5	5	5	2	1	2	<1	<1	<1	17	3	4
16	6	4	5	2	1	1	<1	<1	<1	39	3	8
17	5	4	4	2	1	1	1	<1	<1	19	3	5
18	5	4	4	2	1	1	2	<1	<1	10	4	4
19	6	4	4	3	<1	2	<1	<1	<1	6	4	4
20	8	3	4	3	2	2	2	<1	<1	9	4	5
21	4	3	4	3	2	2	8	<1	<1	27	3	5
22	5	4	4	2	2	2	1	<1	<1	7	4	6
23	4	4	4	3	2	2	6	<1	1	7	4	6
24	11	4	4	6	2	2	14	1	2	7	4	6
25	5	4	4	2	2	2	10	2	3	7	5	6
26	6	4	4	2	2	2	14	3	4	8	4	6
27	4	3	4	10	2	2	5	4	4	7	4	5
28	5	3	3	7	1	2	7	4	5	7	4	5
29	---	---	---	17	1	1	10	6	7	6	3	5
30	---	---	---	3	<1	1	28	6	7	8	3	4
31	---	---	---	2	<1	1	---	---	---	5	3	4
MAX	11	5	5	29	3	3	69	6	7	89	9	33
MIN	4	3	3	2	<1	1	<1	<1	<1	5	2	3

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	5	3	4	2	<1	1	7	6	6	23	3	4
2	5	4	5	3	<1	1	7	5	6	4	3	3
3	6	4	4	4	<1	1	6	5	6	3	3	3
4	6	3	4	4	2	3	6	5	5	21	2	3
5	6	3	5	3	2	3	6	4	5	18	2	3
6	5	4	4	3	2	2	5	4	4	4	2	2
7	4	3	4	4	2	3	5	3	4	4	2	2
8	5	3	3	3	2	2	5	3	4	3	2	2
9	5	2	3	3	2	3	4	3	4	2	1	2
10	5	3	3	3	2	3	4	2	3	3	1	2
11	4	3	3	18	2	3	3	2	3	2	2	2
12	4	2	3	4	2	3	3	2	2	3	1	2
13	4	2	3	65	2	3	7	2	2	2	1	2
14	3	2	2	6	2	3	8	6	7	2	1	2
15	3	2	2	5	3	4	7	6	6	5	1	2
16	5	2	2	5	3	4	6	5	5	2	1	1
17	9	1	2	7	3	5	5	5	5	2	<1	1
18	3	1	2	7	5	5	5	4	4	2	<1	1
19	2	<1	1	7	4	6	4	4	4	3	<1	1
20	3	1	2	10	4	5	6	3	4	1	<1	<1
21	2	<1	2	6	5	5	4	3	4	1	<1	<1
22	2	1	2	7	4	5	5	3	3	1	<1	<1
23	2	<1	1	6	4	5	4	2	3	2	<1	<1
24	4	<1	1	5	4	4	5	2	2	3	<1	<1
25	2	<1	1	5	4	4	15	1	2	12	<1	1
26	3	<1	1	4	3	4	3	1	2	3	<1	1
27	2	<1	1	15	3	4	5	2	4	2	<1	1
28	3	<1	1	4	3	3	5	4	4	3	1	1
29	3	<1	2	4	3	3	5	4	4	2	2	2
30	2	<1	1	8	3	5	10	3	4	4	1	2
31	---	---	---	19	6	7	11	3	4	---	---	---
MAX	9	4	5	65	6	7	15	6	7	23	3	4
MIN	2	<1	1	2	<1	1	3	1	2	1	<1	<1

14309500 WEST FORK COW CREEK NEAR GLENDALE, OR

LOCATION.--Lat 42°48'15", long 123°36'35", in SW 1/4 NE 1/4 sec.11, T.32 S., R.8 W., Douglas County, Hydrologic Unit 17100302, on left bank 1.6 mi downstream from Bear Creek, 11 mi northwest of Glendale, and at mile 0.8.

DRAINAGE AREA.--86.9 mi².

PERIOD OF RECORD.--August 1955 to current year.

REVISED RECORDS.--WSP 1738: 1956, drainage area (former site). WSP 1935: 1956.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,018.48 ft above NGVD of 1929. Prior to June 8, 1964, at site 0.6 mi upstream at different datum.

REMARKS.--Records good. No regulation or diversion upstream from station. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--47 years (water years 1956-2002), 256 ft³/s, 40.11 in/yr, 185,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,700 ft³/s Dec. 22, 1964, gage height, 18.59 ft, from floodmark, from rating curve extended above 2,600 ft³/s on basis of slope-area measurement of peak flow; minimum discharge, 2.5 ft³/s Sept. 10, 2001.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 28	1900	3,030	8.10	Jan. 6	1130	3,010	8.11
Dec. 14	0330	3,370	8.47	Jan. 25	2100	4,010	9.17
Dec. 17	0230	3,160	8.26	Feb. 7	1830	*4,230	*9.40

Minimum discharge, 3.5 ft³/s Oct. 4-6.

DISCHARGE, in CFS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	29	1290	467	326	148	148	67	28	17	6.1	4.7
2	4.3	23	1100	564	370	135	136	63	27	16	6.0	4.7
3	4.0	17	783	534	458	124	127	60	26	15	6.0	4.7
4	3.9	13	539	404	473	116	118	57	25	15	6.2	4.8
5	3.8	11	1470	346	416	112	110	54	24	15	6.7	4.9
6	3.9	10	1260	1950	388	132	104	53	24	14	6.9	5.2
7	4.0	9.4	729	e2200	1990	169	98	51	25	13	7.1	6.5
8	4.3	12	481	e2500	1900	146	92	49	26	13	6.8	5.9
9	4.3	12	373	997	965	140	94	48	29	12	6.4	5.6
10	4.5	11	393	622	654	193	100	48	27	12	6.2	5.5
11	6.2	11	568	454	500	332	89	46	26	11	5.8	5.2
12	7.4	14	501	356	421	611	83	45	25	10	5.5	5.1
13	6.5	27	822	288	367	573	80	43	23	10	5.3	4.9
14	6.1	39	2250	247	321	543	173	42	23	9.8	5.1	4.7
15	5.9	42	913	210	281	469	162	40	23	9.6	4.8	4.6
16	6.0	133	936	182	262	403	145	39	23	9.6	4.6	4.6
17	6.0	85	2080	169	247	354	160	38	23	9.3	4.5	5.0
18	5.9	45	1110	150	227	310	198	38	25	9.1	4.6	6.6
19	5.8	39	1000	171	274	294	181	38	25	9.3	4.8	7.0
20	6.1	118	754	195	392	404	162	41	23	9.5	5.1	6.3
21	6.4	269	548	476	365	528	143	41	23	9.2	5.3	5.6
22	7.2	644	470	478	328	562	125	38	22	8.6	5.5	5.3
23	15	363	422	366	307	486	110	36	21	8.1	5.5	5.1
24	18	184	354	333	262	421	99	34	21	7.8	5.3	4.8
25	11	751	294	1790	227	360	92	33	20	7.6	5.3	4.7
26	9.3	492	245	1920	201	303	86	32	19	7.3	5.3	4.6
27	8.8	212	233	853	179	260	87	32	17	7.2	5.3	4.6
28	9.2	1310	399	567	163	224	80	33	17	7.0	5.3	4.6
29	9.9	1880	405	422	---	197	74	32	17	6.9	5.1	4.7
30	20	748	406	340	---	176	70	30	17	6.6	4.8	5.0
31	48	---	514	292	---	161	---	29	---	6.3	4.8	---
TOTAL	266.2	7553.4	23642	20843	13264	9386	3526	1330	694	321.8	172.0	155.5
MEAN	8.587	251.8	762.6	672.4	473.7	302.8	117.5	42.90	23.13	10.38	5.548	5.183
MAX	48	1880	2250	2500	1990	611	198	67	29	17	7.1	7.0
MIN	3.8	9.4	233	150	163	112	70	29	17	6.3	4.5	4.6
AC-FT	528	14980	46890	41340	26310	18620	6990	2640	1380	638	341	308
CFSM	0.10	2.90	8.78	7.74	5.45	3.48	1.35	0.49	0.27	0.12	0.06	0.06
IN.	0.11	3.23	10.12	8.92	5.68	4.02	1.51	0.57	0.30	0.14	0.07	0.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 2002, BY WATER YEAR (WY)

	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002					
MEAN	39.98	292.3	590.7	665.2	577.7	467.1	265.8	114.1	41.02	17.45	9.926	12.33																																								
MAX	254	1470	1960	1496	1660	934	840	476	99.4	29.5	16.0	56.9																																								
(WY)	1963	1974	1997	1970	1958	1983	1982	1963	1993	1983	1983	1986																																								
MIN	5.19	13.7	13.3	24.2	66.0	91.6	56.2	38.3	17.8	7.55	3.85	3.75																																								
(WY)	1988	1994	1977	1977	1977	1992	1990	1987	1992	1999	1992	2001																																								

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1956 - 2002

ANNUAL TOTAL		45465.6		81153.9								
ANNUAL MEAN		124.6		222.3								
HIGHEST ANNUAL MEAN										256.5		
LOWEST ANNUAL MEAN										499		1974
HIGHEST DAILY MEAN			2250	Dec 14		2500	Jan 8		11000			Dec 22 1964
LOWEST DAILY MEAN			3.2	Sep 17		3.8	Oct 5		3.0			Aug 31 1992
ANNUAL SEVEN-DAY MINIMUM			3.2	Sep 17		4.0	Oct 2		3.2			Aug 26 1992
ANNUAL RUNOFF (AC-FT)		90180		161000						185900		
ANNUAL RUNOFF (CFSM)		1.43		2.56						2.95		
ANNUAL RUNOFF (INCHES)		19.46		34.74						40.11		
10 PERCENT EXCEEDS		331		563						668		
50 PERCENT EXCEEDS		38		41						66		
90 PERCENT EXCEEDS		3.9		5.1						8.3		

e Estimated

UMPQUA RIVER BASIN

14310000 COW CREEK NEAR RIDDLE, OR

LOCATION.--Lat 42°55'25", long 123°25'40", in NE 1/4 sec.32, T.30 S., R.6 W., Douglas County, Hydrologic Unit 17100302, on left bank 0.4 mi upstream from Council Creek, 3.8 mi southwest of Riddle, and at mile 6.7.

DRAINAGE AREA.--456 mi².

PERIOD OF RECORD.--September 1954 to current year.

REVISED RECORDS.--WSP 1935: 1956(M).

GAGE.--Water-stage recorder. Datum of gage is 682.60 ft above NGVD of 1929.

REMARKS.--Records good. Regulated since Oct. 7, 1985 by Galesville Reservoir (station 14308995). Many small diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--31 years (water years 1955-85), 903 ft³/s, 654,200 acre-ft/yr.
17 years (water years 1986-2002), 676 ft³/s, 489,700 acre-ft/yr, regulated.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,400 ft³/s Jan. 15, 1974, gage height, 28.17 ft; minimum discharge, 7.4 ft³/s Aug. 17-19, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 29, 1950, reached a stage of about 28.5 ft, present site and datum, from slope-area measurement, discharge, 41,100 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,350 ft³/s Feb. 7, 8, gage height, 11.32 ft; minimum discharge, 17 ft³/s Sept. 1, 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	115	2280	1490	948	495	445	241	112	48	21	18
2	33	97	2610	1470	984	466	425	227	108	47	20	18
3	33	86	2120	1510	1040	443	408	217	103	44	19	20
4	34	80	1360	1190	1110	421	389	209	98	42	20	21
5	35	78	3020	988	1020	408	375	200	94	41	22	19
6	36	76	3200	4000	937	427	363	194	90	39	23	20
7	38	71	1890	4700	3060	497	348	190	89	39	24	22
8	40	64	1210	5670	6650	472	329	188	87	38	25	24
9	41	59	988	3720	3510	445	323	191	94	36	e25	24
10	44	54	870	2350	2290	481	350	185	94	36	e25	24
11	48	53	1070	1750	1670	656	326	181	87	34	e24	25
12	51	59	1020	1390	1330	1100	312	176	83	33	e23	24
13	53	76	1100	1110	1120	1280	298	170	78	31	e22	23
14	54	92	5920	916	951	1350	383	165	73	30	e21	22
15	56	100	2990	798	833	1200	447	162	70	29	20	23
16	57	193	2140	682	769	1080	412	153	68	29	20	22
17	59	266	5360	609	715	1000	415	143	68	28	19	23
18	61	177	3200	546	666	947	443	140	72	27	19	26
19	64	109	2620	557	664	887	435	140	83	27	20	28
20	66	151	2090	609	895	1020	409	161	73	27	19	30
21	67	361	1600	1070	889	1210	383	191	66	28	20	28
22	68	894	1310	1630	835	1240	356	172	64	29	20	26
23	75	853	1200	1320	814	1080	326	157	62	31	22	26
24	86	446	1000	1150	742	939	298	145	60	26	23	26
25	81	1070	853	2560	662	822	285	139	58	26	23	25
26	79	1080	717	5590	610	724	274	134	55	25	21	24
27	76	528	643	2840	564	649	272	129	52	24	23	24
28	76	1520	923	1890	530	583	271	130	49	22	23	25
29	79	3920	1160	1430	---	535	255	130	49	22	20	25
30	84	1750	1430	1170	---	495	245	123	49	23	18	26
31	129	---	1540	1020	---	467	---	115	---	22	18	---
TOTAL	1836	14478	59434	57725	36808	23819	10600	5198	2288	983	662	711
MEAN	59.2	483	1917	1862	1315	768	353	168	76.3	31.7	21.4	23.7
MAX	129	3920	5920	5670	6650	1350	447	241	112	48	25	30
MIN	33	53	643	546	530	408	245	115	49	22	18	18
AC-FT	3640	28720	117900	114500	73010	47240	21030	10310	4540	1950	1310	1410

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2002, BY WATER YEAR (WY)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	107	521	1304	1890	1651	1162	690	382	183	101	82.5	86.8					
MAX	249	1792	6225	4144	4420	2362	1833	1074	477	189	166	152					
(WY)	1998	1999	1997	1995	1999	1995	1993	1998	1998	1998	1993	1986					
MIN	55.4	88.5	210	189	285	253	194	98.8	47.2	27.6	20.7	21.6					
(WY)	1989	1988	1990	2001	2001	2001	1990	2001	2001	2001	2001	2001					

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1986 - 2002

ANNUAL TOTAL	112851	214542		
ANNUAL MEAN	309	588		
HIGHEST ANNUAL MEAN			676	
LOWEST ANNUAL MEAN			1221	1999
HIGHEST DAILY MEAN			152	2001
LOWEST DAILY MEAN			6650	23100
ANNUAL SEVEN-DAY MINIMUM	5920	Dec 14	6650	Feb 8
ANNUAL RUNOFF (AC-FT)	16	Aug 16	18	Aug 30
10 PERCENT EXCEEDS	17	Aug 13	19	Aug 30
50 PERCENT EXCEEDS	223800		425500	
90 PERCENT EXCEEDS	771		1480	489700
	97		157	1680
	20		23	211
				58

e Estimated

14312000 SOUTH UMPQUA RIVER NEAR BROCKWAY, OR

LOCATION.--Lat 43°08'00", long 123°23'50", in SW 1/4 sec.15, T.28 S., R.6 W., Douglas County, Hydrologic Unit 17100302, on right bank 10 ft upstream from Winston Bridge on State Highway 99, 2.5 mi northeast of Brockway, 4.2 mi downstream from Lookingglass Creek, and at mile 132.8.

DRAINAGE AREA.--1,670 mi².

PERIOD OF RECORD.--December 1905 to June 1912, October 1923 to September 1926, January 1942 to current year. Monthly discharge only for some periods, published in WSP 1318.

REVISED RECORDS.--WSP 1248: 1946(M), 1948(M), 1951. WSP 1448: Drainage area. WDR OR 72-1: 1965(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 462.52 ft above NGVD of 1929 (State Highway Department bench mark). Prior to June 24, 1949, nonrecording gage at several sites within 400 ft of present site at various datums. June 24, 1949, to Oct. 1, 1970, at datum 461.84 ft above sea level (State Highway Department bench mark).

REMARKS.--Records good. Regulation from Ben Irving Reservoir, since January 1980, on Berry Creek during summer months. Many small diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--68 years (water years 1907-11, 1924-26, 1943-2002), 2,765 ft³/s, 22.49 in/yr, 2,003,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 125,000 ft³/s Dec. 23, 1964, gage height, 34.28 ft; minimum discharge, 16 ft³/s Aug. 23, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 21, 1927, reached a stage of about 31.2 ft, present site and datum, discharge, 89,500 ft³/s. Discharge for flood of February 1890, which reached a stage 1.9 ft higher, according to local resident who lived nearby at time of both floods, has been found to be in error and should not be used.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	1030	*29,000	*16.05	Jan. 8	1800	20,400	13.61
Dec. 17	1430	23,100	14.42	Feb. 8	0630	20,300	13.59

Minimum discharge, 33 ft³/s Aug. 18.

DISCHARGE, in CFS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101	334	4440	6860	3210	2500	2300	1310	e850	189	51	46
2	89	334	7350	6620	3180	2260	2260	1250	e770	179	48	47
3	84	274	5380	6810	3150	2050	2310	1220	e700	165	47	47
4	81	234	4030	5190	3200	1870	2380	1200	e650	154	52	46
5	78	209	7940	4150	3120	1750	2450	1150	e600	152	59	48
6	79	194	9520	7630	3020	1760	2450	1100	e550	143	65	54
7	79	186	8360	12800	4440	2020	2280	1050	e500	138	63	61
8	85	180	5080	15800	17100	2220	2070	992	444	136	65	64
9	90	175	4110	13800	10600	1960	1920	944	436	124	65	66
10	96	165	3590	8670	7270	1890	2070	905	428	121	62	68
11	105	158	3640	6210	5550	2000	2170	850	394	120	61	68
12	115	161	4240	5000	4640	2940	2100	802	367	110	58	64
13	133	176	4510	4270	4010	4600	2050	790	342	103	58	61
14	165	205	20800	3600	3630	4700	3970	821	320	103	e55	58
15	143	273	12800	3100	3280	4190	5580	803	309	103	e50	60
16	134	392	9080	2680	3070	3980	3830	784	303	90	e43	59
17	129	685	18300	2420	2950	3980	3450	753	297	86	35	62
18	127	861	13100	2170	2790	3760	3530	744	309	83	34	66
19	126	515	9180	2150	2690	3430	3290	776	399	80	39	73
20	e130	383	7290	2440	4670	3520	2950	850	412	79	42	155
21	e130	526	5960	4180	6200	4130	2650	878	326	79	42	127
22	e150	1850	4670	6930	5410	4650	2380	883	290	85	47	103
23	e250	3640	4040	5590	5210	4730	2180	826	277	79	51	90
24	e400	2020	3380	4700	4900	5360	1970	721	262	79	52	77
25	e350	2180	2920	5440	4180	5230	1790	666	241	74	57	69
26	250	3220	2560	15700	3520	4270	1690	651	228	69	59	64
27	209	2020	2370	10400	3080	3570	1640	e680	210	65	56	60
28	188	1840	3050	6980	2770	3100	1610	e750	200	60	48	59
29	182	8450	3900	5220	---	2760	1450	e850	194	61	48	62
30	190	5350	4890	4150	---	2540	1350	e900	189	60	48	68
31	203	---	6360	3520	---	2390	---	e920	---	56	46	---
TOTAL	4671	37190	206840	195180	130840	100110	74120	27819	11797	3225	1606	2052
MEAN	150.7	1240	6672	6296	4673	3229	2471	897.4	393.2	104.0	51.81	68.40
MAX	400	8450	20800	15800	17100	5360	5580	1310	850	189	65	155
MIN	78	158	2370	2150	2690	1750	1350	651	189	56	34	46
AC-FT	9260	73770	410300	387100	259500	198600	147000	55180	23400	6400	3190	4070
CFSM	0.09	0.74	4.00	3.77	2.80	1.93	1.48	0.54	0.24	0.06	0.03	0.04
IN.	0.10	0.83	4.61	4.35	2.91	2.23	1.65	0.62	0.26	0.07	0.04	0.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1907 - 2002, BY WATER YEAR (WY)

	MEAN	457.9	2676	5659	6884	6267	4720	3224	1968	868.7	266.0	137.3	149.3
MAX	6045	13590	19950	16010	15370	10950	7378	6909	3312	576	392	587	
(WY)	1951	1974	1997	1956	1958	1974	1963	1963	1953	1953	1993	1986	
MIN	103	190	184	262	341	882	589	446	142	52.6	40.2	50.0	
(WY)	1988	1953	1977	1977	1977	1992	1926	1926	1926	1926	1973	2001	

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	FOR 2003 WATER YEAR	FOR WATER YEARS 1907 - 2002
ANNUAL TOTAL	432615	795450	2765	
ANNUAL MEAN	1185	2179	2765	
HIGHEST ANNUAL MEAN			5567	1974
LOWEST ANNUAL MEAN			562	1977
HIGHEST DAILY MEAN	20800	Dec 14	20800	Dec 14
LOWEST DAILY MEAN	33	Sep 19	34	Aug 18
ANNUAL SEVEN-DAY MINIMUM	37	Sep 5	40	Aug 16
ANNUAL RUNOFF (AC-FT)	858100	1578000	2003000	
ANNUAL RUNOFF (CFSM)	0.71	1.30	1.66	
ANNUAL RUNOFF (INCHES)	9.64	17.72	22.49	
10 PERCENT EXCEEDS	2760	5390	6740	
50 PERCENT EXCEEDS	544	802	1050	
90 PERCENT EXCEEDS	45	60	114	

e Estimated

UMPQUA RIVER BASIN

14312500 LAKE CREEK NEAR DIAMOND LAKE, OR

LOCATION.--Lat 43°11'12", long 122°09'55", in NW 1/4 SW 1/4 sec.30, T.27 S., R.6 E., Douglas County, Hydrologic Unit 17100301, Umpqua National Forest, on right bank 600 ft downstream from outlet of Diamond Lake, 1.6 mi northwest of town of Diamond Lake, and at mile 10.7.

DRAINAGE AREA.--54.9 mi².

PERIOD OF RECORD.--May 1922 to September 1925 (no winter records), October 1926 to September 1929, April, July, August 1930, October 1930 to September 1953, October 1971 to October 1977, February 1978 to September 1984, October 1999 to current year. Prior to October 1971 published as "at Diamond Lake, near Fort Klamath".

GAGE.--Water-stage recorder. Elevation of gage is 5,180 ft from river-profile map. Prior to May 26, 1931, nonrecording gage at site 300 ft downstream at different datum. May 26, 1931 to Oct. 6, 1933, nonrecording gage at present site and datum. Prior to September 30, 1999, datum of gage was 2.66 ft higher.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by gates and fish racks at lake outlet. No diversion upstream from station.

AVERAGE DISCHARGE.--41 years (water years 1927-29, 1931-53, 1972-77, 1979-84, 2000-02), 58.3 ft³/s, 42,250 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 336 ft³/s Jan. 1, 1943, gage height, 2.8 ft from rating curve extended above 120 ft³/s; no flow Aug. 25-27, 1931, Sept. 19, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum recorded discharge, 140 ft³/s Dec. 8, gage height, 2.50 ft; minimum discharge, 4.4 ft³/s Aug. 14, 15, result of regulation at outlet.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	102	29	88	75	54	46	25	32	29	15	7.4
2	29	98	29	87	73	53	45	26	32	28	15	7.8
3	29	94	30	86	71	52	45	27	32	27	14	7.7
4	36	90	41	84	70	50	44	28	29	26	14	7.2
5	42	86	52	82	68	50	44	29	25	26	13	6.8
6	40	83	62	91	67	53	44	30	25	25	11	6.8
7	39	80	86	89	72	54	44	30	24	25	6.9	7.2
8	37	76	132	90	74	53	43	31	24	24	7.3	7.4
9	37	73	127	88	73	53	45	31	24	24	7.2	7.4
10	37	71	126	85	70	53	48	31	24	23	6.3	7.6
11	39	70	123	82	68	54	49	32	25	23	6.7	7.9
12	38	68	120	80	67	57	35	33	25	23	6.4	8.2
13	37	70	122	78	64	58	20	28	25	23	5.1	8.4
14	48	70	127	76	63	57	31	21	25	22	4.7	8.3
15	54	69	124	73	61	57	34	22	25	22	4.7	7.9
16	52	73	122	70	60	57	37	23	25	22	4.9	7.9
17	49	72	122	69	56	59	38	24	27	21	5.0	9.6
18	48	71	120	67	57	58	39	24	30	21	5.0	23
19	46	70	119	67	60	57	39	26	30	20	4.9	33
20	45	70	114	69	62	56	40	28	30	20	4.9	32
21	43	78	110	75	62	55	40	24	30	19	5.4	31
22	46	88	107	75	61	53	40	18	30	19	5.5	30
23	50	88	105	74	62	53	40	19	29	19	5.7	29
24	49	86	101	73	60	53	28	20	29	19	6.1	28
25	48	88	97	77	60	52	16	21	29	18	6.3	27
26	46	88	93	81	58	51	17	23	29	17	6.4	27
27	45	89	91	83	57	50	19	25	28	17	6.8	26
28	44	103	89	80	55	49	21	28	28	16	7.1	25
29	44	104	88	78	---	48	22	31	28	16	7.0	24
30	68	102	86	76	---	47	24	31	27	16	7.0	25
31	106	---	88	74	---	47	---	32	---	16	7.2	---
TOTAL	1401	2470	2982	2447	1806	1653	1077	821	825	666	232.5	491.5
MEAN	45.2	82.3	96.2	78.9	64.5	53.3	35.9	26.5	27.5	21.5	7.50	16.4
MAX	106	104	132	91	75	59	49	33	32	29	15	33
MIN	29	68	29	67	55	47	16	18	24	16	4.7	6.8
AC-FT	2780	4900	5910	4850	3580	3280	2140	1630	1640	1320	461	975

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2002, BY WATER YEAR (WY)

	42.0	65.9	79.1	80.9	75.6	69.6	58.1	60.2	67.4	41.1	27.3	28.0
MEAN	42.0	65.9	79.1	80.9	75.6	69.6	58.1	60.2	67.4	41.1	27.3	28.0
MAX	93.5	133	139	142	140	134	106	107	149	81.1	59.7	58.2
(WY)	1972	1974	1953	1953	1953	1972	1972	1943	1953	1953	1953	1953
MIN	11.8	14.7	33.2	33.7	33.9	28.5	5.00	26.5	23.1	9.53	6.19	7.41
(WY)	1942	1937	1937	1977	1977	1941	1942	2002	1934	1979	1980	1981

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1927 - 2002

ANNUAL TOTAL	16192.7	16872.0		
ANNUAL MEAN	44.4	46.2	58.3	
HIGHEST ANNUAL MEAN			90.7	1953
LOWEST ANNUAL MEAN			36.9	1937
HIGHEST DAILY MEAN	132	Dec 8	132	Dec 8
LOWEST DAILY MEAN	7.7	Mar 26	4.7	Aug 14
ANNUAL SEVEN-DAY MINIMUM	11	Aug 7	4.9	Aug 14
ANNUAL RUNOFF (AC-FT)	32120	33470	42250	
10 PERCENT EXCEEDS	87	88	100	
50 PERCENT EXCEEDS	36	40	55	
90 PERCENT EXCEEDS	13	7.9	20	

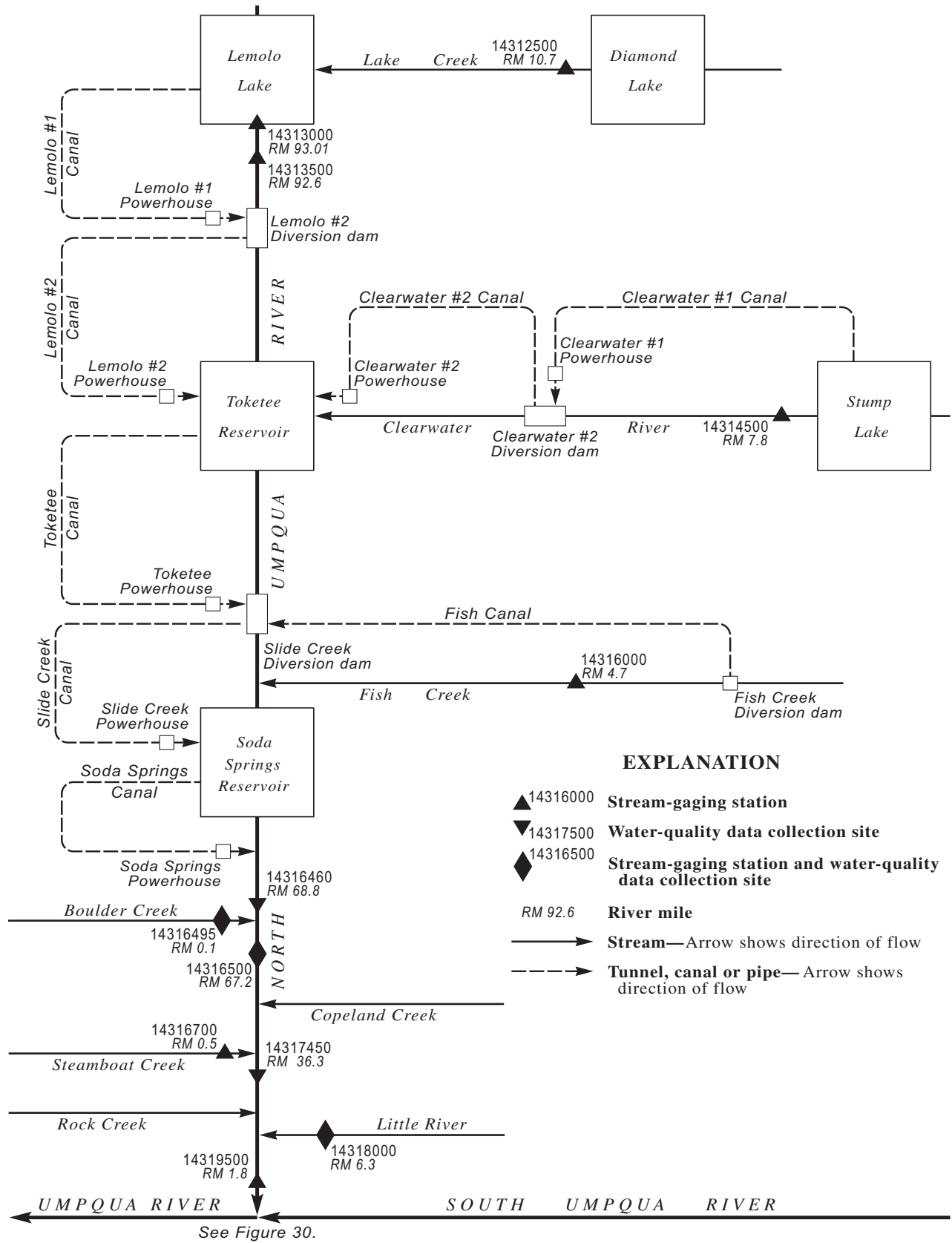


Figure 31. Schematic diagram showing gaging stations and diversions in the North Umpqua River Basin.

UMPQUA RIVER BASIN

14313000 LEMOLO LAKE NEAR TOKETEE FALLS, OR

LOCATION.--Lat 43°19'10", long 122°11'20", in SE 1/4 NW 1/4 sec.11, T.26 S., R.5 E., Douglas County, Hydrologic Unit 17100301, at Lemolo No. 1 diversion dam on North Umpqua River, 0.8 mi downstream from Lake Creek, 13.0 mi east of town of Toketee Falls, and at mile 93.01.

DRAINAGE AREA.--170 mi².

PERIOD OF RECORD.--July 1954 to current year. Prior to October 1960, published as Lemolo Reservoir near Toketee Falls.

GAGE.--Nonrecording gage. Datum of gage is NGVD of 1929 (levels by PacifiCorp).

REMARKS.--Lake is formed by Lemolo No 1 diversion dam. Storage began July 15, 1954. Usable capacity for normal operation, 12,520 acre-ft between elevations 4,097.0 ft and 4,148.5 ft. Dead storage below 4,097.0 ft, 1,040 acre-ft. Water is used for power generation. Figures given herein represent total contents.

COOPERATION.--Gage readings furnished by PacifiCorp.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 14,000 acre-ft Dec. 24, 1964, elevation, 4,149.5 ft; minimum observed, 11 acre-ft Mar. 5, 1955, elevation, 4,055.4 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 13,560 acre-ft June 7, 17, 23, 25, Sept. 4, elevation, 4,148.50 ft; minimum observed, 5,100 acre-ft Mar. 1, 15, elevation, 4,123.35 ft.

MONTHEND ELEVATION AND CONTENTS AT 0900, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	4,147.70	13,220	--
Oct. 31.....	4,136.50	9,050	-4,170
Nov. 30.....	4,125.85	5,790	-3,260
Dec. 31.....	4,129.50	6,840	+1,050
CAL YR 2001.....	--	--	+580
Jan. 31.....	4,127.30	6,200	-640
Feb. 28.....	4,124.00	5,280	-920
Mar. 31.....	4,124.97	5,540	+260
Apr. 30.....	4,143.40	11,500	+5,960
May 31.....	4,147.93	13,320	+1,820
June 30.....	4,148.05	13,370	+50
July 31.....	4,148.18	13,430	+60
Aug. 31.....	4,148.30	13,480	+50
Sept. 30.....	4,147.10	12,970	-510
WTR YR 2002.....	--	--	-250

14313500 NORTH UMPQUA RIVER BELOW LEMOLO LAKE, NEAR TOKETEE FALLS, OR

LOCATION.--Lat 43°19'20", long 122°11'40", in NW 1/4 NW 1/4 sec.11, T.26 S., R.5 E., Douglas County, Hydrologic Unit 17100301, Umpqua National Forest, on right bank 0.4 mi downstream from Lemolo Lake, 13 mi east of town of Toketee Falls, and at mile 92.6.

DRAINAGE AREA.--170 mi² (see REMARKS).

PERIOD OF RECORD.--October 1927 to December 1945, March 1946 to current year. Records since October 1983 are equivalent to earlier records if diversion to Lemolo No. 1 power canal is added to flow past station. Published as "below Lake Creek" prior to October 1952, as "below Lake Creek, near Toketee Falls" October 1952 to September 1953, and as "below Lemolo Reservoir near Toketee Falls" October 1953 to September 1960.

REVISED RECORDS.--WSP 1448: Drainage area. WDR OR-75-1: 1964(M).

GAGE.--Water-stage recorder. Elevation of gage is 4,025 ft above NGVD of 1929, from river-profile map. Prior to July 15, 1954, at site 1 mi upstream at datum about 65 ft higher. July 15, 1954, to Sept. 25, 1955, at site 400 ft upstream at datum 14.11 ft higher.

REMARKS.--Records good. Flow regulated since 1954 by Lemolo Lake (station 14313000); also slightly regulated by Diamond Lake. Records given herein do not include flow in Lemolo No. 1 power canal which, beginning July 1955, diverts 0.4 mi upstream from station for power generation with return flow 4.3 mi downstream.

AVERAGE DISCHARGE.--55 years (water years 1928-83), 423 ft³/s, 33.79 in/yr, 306,500 acre-ft/yr, adjusted for storage. 35 years (water years 1968-2002), 58.9 ft³/s, 42,700 acre-ft/yr (river only).

EXTREMES FOR PERIOD OF RECORD.--River only, maximum discharge, 4,600 ft³/s Dec. 25, 1964, from rating curve extended above 450 ft³/s on basis of slope-area measurement of peak flow, gage height, 9.20 ft, from floodmark; minimum discharge, 6.4 ft³/s July 17, 1954.

Combined flow, maximum discharge, 4,680 ft³/s Dec. 25, 1964, from river rating curve extended above 450 ft³/s on basis of slope-area measurement of peak flow; minimum daily, 9.7 ft³/s May 13, 1955.

EXTREMES FOR CURRENT YEAR.--River only, maximum discharge, 484 ft³/s Dec. 23, gage height, 6.41 ft; minimum discharge, 28 ft³/s Nov. 7-14, Jan. 22 to Feb 15, 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	29	30	29	28	29	29	40	43	32	33	34
2	31	29	29	29	28	29	30	42	42	32	33	34
3	31	29	29	29	28	29	31	43	40	32	33	34
4	31	29	29	29	28	29	33	44	40	32	33	34
5	30	29	29	29	28	29	34	44	39	32	33	35
6	30	29	30	29	28	29	36	43	38	33	33	35
7	30	28	29	30	28	29	38	42	38	32	33	34
8	30	28	29	33	28	29	39	42	38	32	33	34
9	30	28	29	33	28	29	41	41	36	32	32	34
10	30	28	30	33	28	29	46	40	35	32	32	34
11	30	28	29	33	28	29	47	39	34	32	32	33
12	30	28	29	33	28	29	49	40	34	32	32	33
13	30	28	30	33	28	29	55	42	34	32	32	33
14	30	29	30	33	28	29	89	42	33	32	32	33
15	30	30	30	32	28	29	76	43	33	32	32	33
16	30	30	30	32	29	29	64	43	33	32	32	33
17	30	29	30	31	28	29	56	44	34	32	32	33
18	30	29	30	30	29	29	50	45	35	32	32	33
19	30	30	30	30	29	29	47	44	34	32	32	33
20	30	30	29	29	29	29	43	43	33	32	32	34
21	30	30	29	29	29	29	42	42	33	32	32	33
22	30	30	29	e28	29	29	41	41	33	32	32	33
23	30	30	259	e28	29	29	41	40	33	32	33	33
24	29	30	394	e28	29	29	41	40	33	32	33	33
25	29	30	230	e28	29	29	41	40	33	33	33	33
26	29	30	218	e28	29	29	42	41	33	33	33	33
27	29	30	162	e28	29	29	42	44	33	33	33	33
28	29	30	29	e28	29	29	41	47	33	33	33	33
29	29	30	29	e28	---	29	40	47	33	33	33	33
30	29	30	29	e28	---	29	40	46	33	33	34	33
31	29	---	29	e28	---	29	---	45	---	33	34	---
TOTAL	926	877	2027	928	796	899	1344	1319	1056	1000	1011	1003
MEAN	29.9	29.2	65.4	29.9	28.4	29.0	44.8	42.5	35.2	32.3	32.6	33.4
MAX	31	30	394	33	29	29	89	47	43	33	34	35
MIN	29	28	29	28	28	29	29	39	33	32	32	33
AC-FT	1840	1740	4020	1840	1580	1780	2670	2620	2090	1980	2010	1990

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2002, BY WATER YEAR (WY)

	37.7	34.4	40.3	42.8	34.5	37.5	41.1	109	135	82.1	65.5	46.6
MEAN	37.7	34.4	40.3	42.8	34.5	37.5	41.1	109	135	82.1	65.5	46.6
MAX	126	150	185	307	144	200	119	301	687	301	321	225
(WY)	1979	1979	1997	1997	1996	1972	1987	1972	1974	1996	1979	1985
MIN	19.8	19.1	19.5	19.6	19.8	19.8	22.2	22.2	22.6	24.2	20.8	20.9
(WY)	1973	1973	1971	1985	1973	1973	1973	1973	1973	1968	1971	1972

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1968 - 2002

ANNUAL TOTAL	14319	13186	
ANNUAL MEAN	39.2	36.1	
HIGHEST ANNUAL MEAN			58.9
LOWEST ANNUAL MEAN			125
HIGHEST DAILY MEAN	394	Dec 24	24.1
LOWEST DAILY MEAN	28	Feb 2	1070
ANNUAL SEVEN-DAY MINIMUM	28	Feb 20	15
ANNUAL RUNOFF (AC-FT)	28400	26150	17
10 PERCENT EXCEEDS	36	42	42700
50 PERCENT EXCEEDS	30	32	113
90 PERCENT EXCEEDS	28	29	30
			23

e Estimated

UMPQUA RIVER BASIN

14314500 CLEARWATER RIVER ABOVE TRAP CREEK, NEAR TOKETEE FALLS, OR

LOCATION.--Lat 43°14'40", long 122°17'10", in SW 1/4 sec.1, T.27 S., R.4 E., Douglas County, Hydrologic Unit 17100301, Umpqua National Forest, on right bank 900 ft downstream from Clearwater No. 1 diversion dam, 0.4 mi upstream from Trap Creek, 8.7 mi east of town of Toketee Falls, and at mile 7.8.

DRAINAGE AREA.--41.6 mi² (see REMARKS).

PERIOD OF RECORD.--October 1927 to December 1945, March 1946 to current year. Records since October 1983 are equivalent to earlier records if diversion to Clearwater No. 1 power canal is added to flow past station. Monthly discharge only December 1927 to March 1928, published in WSP 1318. Prior to October 1952, published as "above Trap Creek."

REVISED RECORDS.--WSP 1124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,862.84 ft above NGVD of 1929 (levels by Pacific Power & Light Co.). Prior to Dec. 1, 1953, at two sites about 0.4 mi downstream at different datums.

REMARKS.--No estimated daily discharges. Records fair. Records after September 1983 do not include flow in Clearwater No. 1 power canal, completed in June 1953, which diverts 900 ft upstream from station for generation of power and returns water to Clearwater River 2.5 mi downstream from station.

AVERAGE DISCHARGE.--55 years (water years 1928-83), 173 ft³/s, 125,300 acre-ft/yr.
19 years (water years 1984-2002), 19.7 ft³/s, 14,270 acre-ft/yr (river only).

EXTREMES FOR PERIOD OF RECORD.--River only, maximum discharge, 848 ft³/s Dec. 23, 1964, gage height, 7.19 ft; maximum gage height, 7.87 ft Dec. 23, 1964, log jam; minimum discharge, 0.08 ft³/s Sept. 21, 1977, result of beavers plugging release gate at diversion dam 900 ft upstream.

Combined flow, maximum discharge, 1,020 ft³/s Dec. 23, 1964; minimum daily, 91 ft³/s Nov. 4-6, 1931.

EXTREMES FOR CURRENT YEAR.--River only, maximum discharge, 169 ft³/s Apr. 14, gage height, 4.24 ft; minimum discharge, 5.4 ft³/s Jan. 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	132	6.9	7.7	7.1	7.7	8.3	11	7.9	6.7	7.7	7.7
2	132	131	6.8	8.8	6.7	7.5	9.1	13	7.5	6.7	7.7	7.7
3	133	130	6.8	7.5	6.6	7.2	10	14	7.2	6.9	7.7	7.7
4	132	130	6.8	7.5	6.5	7.1	9.6	12	7.1	7.1	7.7	7.7
5	132	130	7.0	6.9	7.1	7.3	8.7	11	7.5	7.1	7.7	7.7
6	132	130	7.6	22	7.0	9.2	14	9.1	7.9	7.1	7.7	7.8
7	131	130	7.2	15	11	9.6	12	8.1	7.5	7.1	7.7	7.8
8	132	129	7.1	24	9.1	7.3	10	7.5	7.2	7.1	7.7	7.7
9	133	129	7.1	12	7.4	7.1	21	7.3	7.0	7.1	7.7	7.7
10	133	129	7.1	11	7.4	7.0	41	7.3	6.8	7.1	7.7	7.7
11	140	129	7.0	8.3	7.1	7.5	40	7.1	6.8	7.1	7.7	7.7
12	134	130	7.1	9.1	7.1	12	39	7.7	7.0	7.1	7.7	7.7
13	133	131	11	8.2	7.1	7.5	55	9.5	8.3	7.1	7.7	7.7
14	133	131	12	8.0	7.1	6.9	152	8.6	10	7.1	7.7	7.7
15	133	130	6.9	7.4	6.9	6.8	121	9.0	8.1	7.1	7.7	7.7
16	132	138	8.8	8.4	7.1	6.8	84	8.3	7.8	7.1	7.7	7.7
17	131	97	12	7.7	7.1	6.8	60	9.0	7.5	7.2	7.7	9.4
18	131	7.3	7.0	6.3	6.9	6.8	39	9.8	18	7.4	7.7	7.8
19	131	7.2	7.6	6.3	7.4	6.8	27	8.9	7.6	7.4	7.7	7.6
20	131	7.3	8.0	6.2	8.5	6.8	21	7.5	7.1	7.4	7.7	7.4
21	131	8.0	6.9	6.8	7.8	6.8	17	7.4	7.1	7.4	7.7	7.4
22	136	9.5	7.3	6.2	8.2	6.8	13	7.0	7.1	7.4	7.7	7.4
23	138	7.1	6.9	6.8	12	7.2	12	6.6	7.2	7.5	7.7	7.4
24	133	7.0	7.2	6.8	9.8	7.3	11	6.5	7.1	7.7	7.7	7.4
25	131	7.1	7.7	9.6	8.7	6.9	11	6.5	7.1	7.7	7.7	7.4
26	131	7.1	7.7	9.0	8.4	6.9	11	6.8	7.2	7.6	7.7	7.4
27	131	6.9	7.8	8.2	8.2	7.5	11	8.4	7.1	7.5	7.7	7.4
28	131	7.2	8.0	8.0	8.1	7.8	9.0	14	7.0	7.4	7.7	7.4
29	131	7.1	7.0	8.0	---	8.5	8.9	22	7.1	7.4	7.7	7.6
30	135	6.9	7.4	8.0	---	9.1	9.5	16	6.9	7.4	7.7	7.7
31	134	---	9.5	7.8	---	9.1	---	8.7	---	7.6	7.7	---
TOTAL	4045	2281.7	241.2	283.5	219.4	235.6	895.1	295.6	232.7	224.6	238.7	230.1
MEAN	130	76.1	7.78	9.15	7.84	7.60	29.8	9.54	7.76	7.25	7.70	7.67
MAX	140	138	12	24	12	12	152	22	18	7.7	7.7	9.4
MIN	64	6.9	6.8	6.2	6.5	6.8	8.3	6.5	6.8	6.7	7.7	7.4
AC-FT	8020	4530	478	562	435	467	1780	586	462	445	473	456

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2002, BY WATER YEAR (WY)

	23.2	20.7	15.0	16.8	21.1	13.9	22.1	42.2	15.7	20.7	15.1	9.89
MEAN	23.2	20.7	15.0	16.8	21.1	13.9	22.1	42.2	15.7	20.7	15.1	9.89
MAX	130	177	68.5	143	177	45.0	66.1	125	56.8	88.3	100	59.4
(WY)	2002	2001	1997	1997	1996	1997	1997	1984	1999	1993	1996	1994
MIN	4.91	5.04	3.48	5.43	5.32	5.56	5.98	5.10	5.56	5.43	5.04	5.02
(WY)	1989	1988	1998	1987	1990	1988	1991	1992	1992	1990	1986	1987

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1984 - 2002

ANNUAL TOTAL	8524.8	9423.2	
ANNUAL MEAN	23.4	25.8	19.7
HIGHEST ANNUAL MEAN			52.0
LOWEST ANNUAL MEAN			5.85
HIGHEST DAILY MEAN	140	Oct 11	659
LOWEST DAILY MEAN	5.3	Apr 3	2.0
ANNUAL SEVEN-DAY MINIMUM	5.5	Apr 3	3.2
ANNUAL RUNOFF (AC-FT)	16910	18690	14270
10 PERCENT EXCEEDS	130	130	45
50 PERCENT EXCEEDS	6.6	7.7	6.6
90 PERCENT EXCEEDS	5.9	6.9	5.3

14316000 FISH CREEK AT BIG CAMAS RANGER STATION, NEAR TOKETEE FALLS, OR

LOCATION.--Lat 43°13'50", long 122°26'45", in SE 1/4 sec.10, T.27 S., R.3 E., Douglas County, Hydrologic Unit 17100301, Umpqua National Forest, 0.2 mi upstream from Camas Creek, 0.7 mi east of Big Camas ranger station, 3.2 mi south of town of Toketee Falls, and at mile 4.7.

DRAINAGE AREA.--68.8 mi² (see REMARKS).

PERIOD OF RECORD.--October 1947 to current year. Records since October 1983 are equivalent to earlier records if diversion to Fish Creek power canal is added to flow past station. Prior to October 1952, published as "at Big Camas ranger station."

REVISED RECORDS.--WSP 1448: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,858.52 ft above NGVD of 1929 (levels by PacifiCorp). Prior to July 10, 1951, water-stage recorder and July 10 to Aug. 10, 1951, nonrecording gage at site 1,000 ft upstream at datum 13.72 ft higher. Aug. 11 to Nov. 3, 1951, nonrecording gage at site 200 ft downstream at different datum. Nov. 4, 1951, to Sept. 30, 1956, water-stage recorder at present site at datum 1.92 ft higher.

REMARKS.--No estimated daily discharges. Records good. Records given herein do not include flow in Fish Creek power canal (diversion began June 18, 1952), which diverts water 2 mi upstream from station for power generation at Fish Creek powerplant; diversion discharged to North Umpqua River 600 ft downstream from Toketee powerplant.

AVERAGE DISCHARGE.--36 years (water years 1947-83), 237 ft³/s, 46.78 in/yr, 171,700 acre-ft/yr.
19 years (water years 1984-2002), 125 ft³/s, 24.68 in/yr, 90,540 acre-ft/yr (river only).

EXTREMES FOR PERIOD OF RECORD.--River only, maximum discharge, 12,100 ft³/s Dec. 22, 1964, gage height, 13.9 ft, from floodmark; minimum discharge, 2.3 ft³/s Sept. 25, 1957.

Combined flow, maximum discharge, 12,100 ft³/s Dec. 22, 1964; minimum daily, 19 ft³/s July 30, 1979, result of diversion dam manipulation.

EXTREMES FOR CURRENT YEAR.--River only, maximum discharge, 2,000 ft³/s Apr. 14, gage height, 7.16 ft; minimum discharge, 10 ft³/s Nov. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	13	32	152	40	69	94	118	239	32	30	44
2	17	13	29	294	34	54	140	146	202	32	30	44
3	17	14	27	265	32	44	209	163	170	32	30	43
4	17	14	33	170	30	37	275	158	156	32	31	44
5	17	14	28	123	32	35	351	158	158	30	47	42
6	17	15	180	518	33	50	351	151	144	32	61	41
7	17	17	101	594	67	72	306	134	118	32	60	45
8	17	16	47	1010	77	50	263	118	93	32	59	42
9	18	16	33	655	49	41	339	110	75	32	58	40
10	17	17	30	406	40	37	507	99	64	30	57	39
11	34	17	25	278	36	54	459	94	62	30	57	33
12	16	19	22	239	34	193	456	109	64	31	56	31
13	17	27	168	190	32	137	608	140	70	30	54	27
14	16	31	362	146	32	96	1530	139	71	30	53	23
15	17	18	139	111	33	73	917	142	64	32	52	21
16	18	50	208	86	35	57	579	138	58	32	52	19
17	18	32	263	67	39	43	414	156	63	33	52	39
18	18	22	139	49	41	35	308	173	177	32	51	30
19	18	25	83	41	61	33	245	166	85	31	51	20
20	18	46	58	37	123	32	200	151	61	31	51	19
21	18	110	42	43	180	34	167	148	51	31	52	21
22	29	207	36	32	213	46	151	126	44	30	50	21
23	58	67	54	31	308	86	145	106	39	31	48	21
24	20	33	66	38	256	99	131	106	35	30	48	22
25	20	25	54	63	184	92	134	129	32	30	48	22
26	21	20	46	61	137	82	140	172	31	30	48	22
27	20	19	44	47	108	77	136	210	30	31	47	22
28	23	63	61	42	88	70	120	277	30	31	47	22
29	19	57	53	57	---	70	111	327	36	30	46	22
30	33	30	58	48	---	71	111	317	32	31	45	27
31	22	---	183	42	---	77	---	271	---	31	45	---
TOTAL	645	1067	2704	5935	2374	2046	9897	4952	2554	964	1516	908
MEAN	20.8	35.6	87.2	191	84.8	66.0	330	160	85.1	31.1	48.9	30.3
MAX	58	207	362	1010	308	193	1530	327	239	33	61	45
MIN	16	13	22	31	30	32	94	94	30	30	30	19
AC-FT	1280	2120	5360	11770	4710	4060	19630	9820	5070	1910	3010	1800
CFSM	0.30	0.52	1.27	2.78	1.23	0.96	4.80	2.32	1.24	0.45	0.71	0.44
IN.	0.35	0.58	1.46	3.21	1.28	1.11	5.35	2.68	1.38	0.52	0.82	0.49

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2002, BY WATER YEAR (WY)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	28.2	95.9	163	182	163	183	219	231	134	39.5	35.0	29.4							
MAX	78.8	387	747	682	545	581	434	505	429	111	74.5	74.5							
(WY)	1987	1997	1997	1997	1986	1993	1989	1993	1999	1999	1985	1986							
MIN	11.7	17.2	24.1	21.1	22.6	31.0	57.9	36.4	28.9	23.5	23.3	13.6							
(WY)	1984	1990	2001	2001	2001	1992	2001	1992	1987	1996	1992	1990							

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1984 - 2002

ANNUAL TOTAL	15627	35562		
ANNUAL MEAN	42.8	97.4	125	
HIGHEST ANNUAL MEAN			247	1997
LOWEST ANNUAL MEAN			36.8	2001
HIGHEST DAILY MEAN	493	May 16	1530	Apr 14
LOWEST DAILY MEAN	13	Nov 1	13	Nov 1
ANNUAL SEVEN-DAY MINIMUM	14	Nov 1	14	Nov 1
ANNUAL RUNOFF (AC-FT)	31000	70540	90540	
ANNUAL RUNOFF (CFSM)	0.62	1.42	1.82	
ANNUAL RUNOFF (INCHES)	8.45	19.23	24.68	
10 PERCENT EXCEEDS	82	209	309	
50 PERCENT EXCEEDS	27	47	45	
90 PERCENT EXCEEDS	18	19	17	

14316460 NORTH UMPQUA RIVER AT SODA SPRINGS, NEAR TOKETEETEE FALLS, OR

LOCATION.--Lat 43°18'22", long 122°30'42", in NE 1/4 SW 1/4 sec.18, T.26 S., R.3 E., Douglas County, Hydrologic Unit 17100301, on right bank 0.9 mi upstream from Boulder Creek, 4.5 mi west of Toketee Falls, and at mile 68.8.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1997 to current year.

pH: October 1997 to current year.

WATER TEMPERATURE: October 1997 to current year.

DISSOLVED OXYGEN: October 1997 to current year.

TURBIDITY: October 1999 to current year.

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

REMARKS.--

SPECIFIC CONDUCTANCE: Records good except for the period Apr. 5 to July 31, which are fair.

pH: Records good.

WATER TEMPERATURE: Records good.

DISSOLVED OXYGEN: Records good.

TURBIDITY: Records good. The probe was checked using a polymer bead standard.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 83 microsiemens May 24, 2001; minimum recorded, 30 microsiemens Apr. 14, 2002.

pH: Maximum recorded, 8.4 units July 30, Aug. 1-5, 2002; minimum recorded, 6.9 units Dec. 19, 2001.

WATER TEMPERATURE: Maximum recorded, 15.5°C Aug. 11, 2001, but may have been higher during period of missing record; minimum recorded, 1.9°C Jan. 29, 2002.

DISSOLVED OXYGEN: Maximum recorded, 15.2 mg/L Nov. 19, 2000; minimum recorded, 6.9 mg/L July 11, 2001, but may have been lower during period of missing record.

TURBIDITY: Maximum, 42 NTU Nov. 29, 2001; minimum, <1 many days each year.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 69 microsiemens Sept. 16; minimum, 30 microsiemens Apr. 14.

pH: Maximum recorded, 8.4 units July 30, Aug. 1-5; minimum recorded, 6.9 units Dec. 19.

WATER TEMPERATURE: Maximum recorded, 15.3°C July 13; minimum recorded, 1.9°C Jan. 29.

DISSOLVED OXYGEN: Maximum recorded, 14.1 mg/L Jan. 30; minimum recorded, 9.8 mg/L Aug. 14, but may have been lower during period of missing record.

TURBIDITY: Maximum, 42 NTU Nov. 29; minimum, <1 many days throughout the year.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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

14316460 NORTH UMPQUA RIVER AT SODA SPRINGS, NEAR TOKETEE FALLS, OR--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	45	43	44	58	55	57	63	61	62	65	63	64
2	45	44	44	---	---	---	63	61	62	64	61	63
3	47	44	45	59	57	58	63	61	62	64	62	63
4	47	44	46	59	57	59	63	61	62	64	61	63
5	42	40	41	60	58	59	64	61	62	64	62	63
6	47	46	46	60	58	59	64	61	62	64	62	63
7	48	46	47	60	59	60	64	61	62	65	60	63
8	49	47	48	61	59	60	66	61	62	63	61	62
9	49	47	48	62	59	61	63	58	61	63	60	62
10	49	47	48	63	61	62	63	57	61	68	60	63
11	50	43	48	65	62	63	63	62	62	63	61	62
12	50	48	49	65	59	63	65	62	63	63	62	62
13	50	45	48	64	62	63	64	61	63	63	62	62
14	52	47	48	64	59	61	64	62	63	63	60	62
15	49	47	48	65	58	62	64	62	63	62	61	62
16	49	46	48	65	59	64	64	62	63	69	60	61
17	50	47	48	65	62	64	64	62	63	61	59	60
18	48	45	46	57	52	54	64	62	63	61	59	60
19	45	39	43	63	61	62	64	61	63	63	60	61
20	53	50	52	63	61	62	63	61	62	63	54	59
21	54	52	53	63	61	62	63	61	62	61	57	59
22	55	52	53	63	62	62	67	60	63	61	59	60
23	55	53	54	63	62	62	62	60	61	60	54	55
24	56	52	54	63	62	62	62	60	61	61	57	60
25	55	54	55	63	59	62	63	60	61	63	60	61
26	58	54	56	63	62	62	63	61	62	63	61	62
27	57	56	56	64	62	63	63	59	61	63	62	62
28	57	56	56	64	62	63	64	60	62	63	61	62
29	57	52	54	64	62	63	65	63	64	63	60	62
30	58	51	56	64	62	63	65	62	63	64	61	62
31	---	---	---	61	52	56	65	63	63	---	---	---
MONTH	58	39	49	---	---	---	67	57	62	69	54	62

UMPQUA RIVER BASIN

14316460 NORTH UMPQUA RIVER AT SODA SPRINGS, NEAR TOKETEE FALLS, OR--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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

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

14316460 NORTH UMPQUA RIVER AT SODA SPRINGS, NEAR TOKETEE FALLS, OR--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	10.2	9.3	9.6	7.7	7.4	7.6	4.3	4.0	4.2	5.1	4.6	4.9
2	10.5	9.5	9.9	7.6	7.2	7.4	4.2	3.9	4.0	5.3	4.9	5.2
3	10.1	9.5	9.8	7.2	6.5	7.0	4.3	3.9	4.1	4.9	4.6	4.7
4	10.2	9.1	9.6	6.7	6.2	6.5	3.9	3.3	3.7	4.5	4.0	4.2
5	10.3	9.2	9.6	6.8	6.2	6.6	3.3	2.4	2.8	4.8	4.2	4.5
6	9.9	9.2	9.6	6.8	6.1	6.6	3.6	2.3	2.9	5.3	4.8	5.1
7	9.3	8.6	9.1	6.1	5.2	5.8	4.0	3.6	3.8	5.5	5.2	5.3
8	8.7	8.4	8.5	5.7	5.2	5.4	4.2	3.8	3.9	5.6	5.3	5.4
9	8.7	8.2	8.4	5.9	5.3	5.6	4.2	4.0	4.1	5.3	4.7	4.9
10	8.3	7.9	8.1	6.0	5.6	5.8	4.0	3.2	3.5	4.8	4.4	4.6
11	8.3	7.8	8.0	6.7	5.9	6.4	3.3	3.1	3.2	5.1	4.6	4.8
12	8.4	7.7	8.1	7.2	6.6	6.9	3.5	3.3	3.4	5.2	5.0	5.1
13	8.5	7.7	8.2	7.1	6.8	7.0	4.1	3.3	3.5	5.1	4.5	4.7
14	8.7	8.2	8.4	6.9	6.7	6.8	4.3	3.7	4.0	4.5	4.0	4.1
15	8.5	8.1	8.3	6.9	6.7	6.8	3.7	3.5	3.6	4.0	2.9	3.3
16	8.7	8.2	8.5	7.0	6.7	6.8	4.5	3.7	4.0	2.9	2.4	2.6
17	8.5	7.9	8.2	6.9	6.1	6.6	4.8	4.5	4.6	3.3	2.8	3.1
18	7.9	7.1	7.5	6.1	5.5	5.8	4.5	4.0	4.2	3.7	3.3	3.5
19	7.5	7.1	7.3	6.1	5.5	5.8	4.2	3.8	4.0	3.8	3.3	3.5
20	7.9	7.4	7.7	6.8	6.1	6.5	4.3	3.9	4.0	3.4	2.8	3.1
21	7.9	7.4	7.7	6.6	6.3	6.4	4.0	3.1	3.5	3.1	2.5	2.8
22	7.5	7.3	7.4	6.3	6.0	6.2	3.4	3.2	3.3	2.9	2.5	2.7
23	7.5	7.3	7.4	6.0	5.4	5.7	3.6	3.3	3.5	3.2	2.9	3.0
24	7.3	6.7	7.0	5.5	5.0	5.3	3.4	2.8	3.0	3.4	3.0	3.2
25	6.9	6.6	6.7	5.0	3.9	4.5	3.4	2.9	3.2	3.5	3.1	3.4
26	7.1	6.7	6.9	4.0	3.8	3.9	3.8	3.4	3.6	3.3	2.7	3.1
27	7.2	6.7	6.9	3.8	3.2	3.6	4.2	3.7	4.0	2.8	2.6	2.7
28	7.2	6.8	7.0	3.5	3.2	3.3	4.3	4.0	4.2	3.0	2.5	2.7
29	7.4	6.9	7.2	4.0	3.4	3.8	4.4	4.0	4.2	2.6	1.9	2.3
30	7.6	7.2	7.5	4.1	3.8	4.0	4.4	4.2	4.3	2.7	2.0	2.3
31	7.8	7.6	7.7	---	---	---	4.7	4.4	4.6	3.0	2.7	2.9
MONTH	10.5	6.6	8.1	7.7	3.2	5.9	4.8	2.3	3.8	5.6	1.9	3.8

UMPQUA RIVER BASIN

14316460 NORTH UMPQUA RIVER AT SODA SPRINGS, NEAR TOKETEE FALLS, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	3.4	3.0	3.3	4.2	3.4	3.6	6.7	5.8	6.3	8.1	6.6	7.1
2	3.4	3.2	3.3	3.8	3.4	3.6	7.0	6.0	6.5	8.6	7.9	8.3
3	3.5	3.2	3.4	4.1	3.7	3.9	7.1	6.2	6.7	8.9	8.0	8.3
4	3.6	3.0	3.3	4.7	4.0	4.3	7.3	6.2	6.7	8.4	7.3	7.8
5	3.3	3.1	3.2	4.7	4.4	4.5	7.2	6.3	6.5	8.5	7.6	7.8
6	3.6	3.1	3.3	4.9	4.4	4.7	6.6	6.0	6.3	8.3	7.4	7.7
7	3.7	3.3	3.5	4.8	3.7	4.3	6.9	5.9	6.4	8.1	7.0	7.3
8	3.7	3.5	3.6	3.8	3.3	3.5	7.3	5.9	6.4	8.0	6.7	7.1
9	3.6	3.4	3.5	3.9	3.5	3.7	7.4	6.2	6.6	8.3	7.5	7.8
10	3.9	3.5	3.7	4.4	3.9	4.1	6.6	5.8	6.1	8.2	7.2	7.6
11	4.1	3.8	4.0	5.2	4.4	4.8	6.9	6.1	6.4	8.6	7.2	7.7
12	4.0	3.8	3.9	5.2	4.0	4.8	7.4	6.1	6.6	9.5	8.3	8.7
13	4.2	3.8	4.0	4.0	3.5	3.7	7.4	6.4	6.7	9.8	8.2	9.0
14	4.1	3.8	4.0	4.3	3.6	3.9	6.5	5.2	5.8	8.7	7.4	7.9
15	4.0	3.7	3.9	4.3	3.8	4.0	5.3	4.6	5.0	9.2	8.2	8.5
16	4.5	4.0	4.3	4.1	3.1	3.5	5.0	4.5	4.8	9.4	7.7	8.3
17	4.5	4.2	4.3	3.2	2.8	3.0	5.0	4.3	4.6	10.0	8.7	9.3
18	4.8	4.3	4.7	3.8	3.2	3.5	5.9	4.5	5.1	10.2	9.0	9.4
19	4.9	4.4	4.7	4.9	3.8	4.2	6.6	5.2	5.8	9.4	7.9	8.4
20	4.6	4.1	4.4	4.9	4.3	4.7	7.1	5.6	6.3	8.0	7.5	7.8
21	5.3	4.8	5.1	5.4	5.0	5.2	7.7	5.9	6.6	8.0	7.2	7.6
22	5.4	4.8	5.1	5.4	5.1	5.3	8.0	6.2	7.0	7.9	7.2	7.5
23	5.5	5.2	5.4	5.4	5.2	5.3	8.0	6.7	7.2	9.1	7.1	7.8
24	5.5	5.0	5.1	5.6	5.0	5.4	7.9	6.0	6.8	9.3	8.6	8.9
25	5.0	4.2	4.4	5.6	5.0	5.4	---	---	---	9.6	8.9	9.3
26	5.0	4.3	4.6	5.9	4.9	5.4	8.3	7.1	7.5	10.1	9.5	9.8
27	5.0	4.2	4.5	6.3	5.5	5.9	7.4	6.3	6.7	10.1	9.1	9.6
28	4.9	4.0	4.2	6.3	5.4	5.8	7.3	5.9	6.4	9.2	8.8	9.0
29	---	---	---	6.3	5.5	5.9	7.5	6.7	7.0	10.8	8.9	9.6
30	---	---	---	6.3	5.5	5.9	7.4	6.9	7.1	11.1	9.8	10.4
31	---	---	---	6.3	5.5	6.0	---	---	---	10.9	9.6	10.1
MONTH	5.5	3.0	4.1	6.3	2.8	4.6	---	---	---	11.1	6.6	8.4
	JUNE			JULY			AUGUST			SEPTEMBER		
1	11.0	9.8	10.2	13.5	12.8	13.1	14.5	13.5	13.8	12.5	11.3	11.9
2	10.4	9.1	9.7	---	---	---	14.0	12.6	13.0	12.7	11.4	12.0
3	9.9	9.1	9.6	13.8	13.0	13.2	13.5	12.5	12.8	12.4	11.3	12.0
4	10.8	9.6	10.2	13.4	12.5	12.8	12.9	11.8	12.0	11.8	10.7	11.5
5	11.3	10.6	11.0	13.0	12.2	12.5	11.8	11.1	11.3	11.4	10.3	10.9
6	11.3	10.6	11.0	13.4	12.3	12.7	11.6	10.6	10.9	10.6	9.8	10.3
7	10.9	9.8	10.1	13.5	12.8	13.1	12.4	10.9	11.4	10.7	9.6	10.0
8	10.2	8.4	9.1	13.6	13.1	13.2	12.6	11.3	11.7	10.2	9.4	9.8
9	9.1	8.1	8.6	13.7	12.8	13.1	13.0	11.6	12.1	10.7	9.4	9.8
10	10.3	8.8	9.5	14.5	13.2	13.5	13.7	12.0	12.6	11.3	9.7	10.4
11	11.1	10.1	10.6	14.7	13.8	14.1	14.0	12.6	13.1	11.7	10.3	10.9
12	11.9	10.8	11.4	14.9	14.2	14.5	14.0	12.9	13.3	11.9	10.7	11.3
13	12.3	11.4	11.9	15.3	13.8	14.5	14.3	12.9	13.4	11.9	11.2	11.6
14	12.6	11.9	12.2	15.0	13.9	14.4	14.4	13.2	13.7	11.9	11.1	11.6
15	12.5	11.7	12.1	14.6	13.6	14.0	14.4	13.2	13.6	11.6	10.7	11.2
16	12.4	11.7	12.1	14.2	13.4	13.7	14.2	13.1	13.4	11.1	10.3	10.8
17	12.2	10.1	11.1	14.3	13.3	13.6	13.8	12.7	13.0	10.8	10.3	10.6
18	10.7	9.7	10.2	14.3	13.4	13.7	13.1	11.9	12.3	11.2	10.3	10.6
19	11.3	9.9	10.4	14.2	13.1	13.5	12.3	11.4	11.7	11.2	10.3	10.7
20	11.8	10.5	11.2	14.6	13.2	13.7	12.2	11.1	11.6	11.4	10.4	10.8
21	12.2	11.6	11.9	14.6	13.6	14.0	12.4	11.3	11.6	11.3	10.4	10.7
22	12.4	11.6	12.0	14.3	13.7	13.9	12.6	11.2	11.8	11.2	10.3	10.5
23	13.1	12.2	12.7	14.1	13.2	13.5	12.6	11.4	11.9	11.2	10.3	10.6
24	12.9	12.3	12.6	14.3	13.5	13.9	12.2	11.2	11.8	11.1	10.4	10.7
25	13.0	12.4	12.7	13.9	13.1	13.4	12.4	11.2	11.8	10.8	10.2	10.4
26	13.5	12.7	13.1	14.1	13.0	13.4	12.9	11.4	12.1	10.5	9.8	10.2
27	13.6	13.0	13.3	14.4	13.3	13.7	12.8	11.8	12.3	10.2	9.6	9.8
28	13.3	12.5	12.9	14.4	13.4	13.6	13.0	12.1	12.4	10.2	9.6	9.8
29	12.8	12.1	12.6	14.3	13.4	13.6	13.2	12.0	12.5	9.8	9.2	9.6
30	13.4	12.4	12.9	14.6	13.4	13.9	13.2	11.8	12.5	9.2	8.6	8.9
31	---	---	---	14.6	13.6	14.0	12.6	11.3	12.1	---	---	---
MONTH	13.6	8.1	11.3	---	---	---	14.5	10.6	12.4	12.7	8.6	10.7

14316460 NORTH UMPQUA RIVER AT SODA SPRINGS, NEAR TOKETEE FALLS, OR--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	10.4	10.1	10.2	10.6	10.0	10.2	11.8	11.6	11.7	11.4	11.1	11.3
2	10.4	10.0	10.2	10.5	10.0	10.2	11.8	11.6	11.7	11.3	11.1	11.1
3	10.4	10.0	10.2	10.6	10.1	10.3	12.0	11.6	11.8	11.5	11.2	11.3
4	10.4	10.1	10.2	10.6	10.2	10.4	12.1	11.9	12.0	11.7	11.4	11.6
5	10.6	10.1	10.3	10.5	10.0	10.3	12.4	12.0	12.3	11.7	11.4	11.6
6	10.6	10.2	10.4	10.4	10.0	10.2	12.4	12.0	12.3	11.6	11.4	11.5
7	10.7	10.3	10.5	11.0	10.2	10.5	12.3	12.0	12.1	11.9	11.4	11.5
8	10.9	10.4	10.6	10.8	10.3	10.5	12.2	11.9	12.1	11.9	11.6	11.8
9	10.9	10.6	10.7	---	---	---	12.2	11.9	12.1	12.1	11.8	12.0
10	11.2	10.6	10.9	---	---	---	12.3	12.0	12.1	12.2	11.9	12.0
11	11.4	10.9	11.1	---	---	---	12.3	12.0	12.2	12.1	11.9	12.0
12	11.4	11.0	11.2	---	---	---	12.2	12.0	12.1	12.1	11.9	12.0
13	11.3	11.1	11.2	---	---	---	12.2	11.5	11.9	12.4	12.1	12.2
14	11.3	11.0	11.1	---	---	---	11.8	11.5	11.6	12.5	12.2	12.4
15	11.5	11.1	11.2	---	---	---	11.8	11.7	11.8	12.8	12.4	12.6
16	11.4	11.0	11.2	---	---	---	11.8	11.4	11.6	13.1	12.8	12.9
17	11.5	11.1	11.3	---	---	---	11.6	11.4	11.5	12.9	12.7	12.9
18	11.7	11.3	11.5	---	---	---	11.6	11.5	11.5	12.9	12.7	12.8
19	11.8	11.5	11.6	---	---	---	11.9	11.5	11.7	13.1	12.6	12.8
20	11.7	11.4	11.5	---	---	---	12.0	11.7	11.8	13.2	12.9	13.0
21	11.8	11.3	11.6	11.7	11.3	11.5	12.1	11.8	12.0	13.3	12.8	13.1
22	11.8	11.4	11.6	11.4	11.2	11.3	12.2	12.0	12.1	13.4	13.2	13.3
23	11.9	11.4	11.7	11.9	11.4	11.6	12.3	12.0	12.2	13.7	13.3	13.4
24	12.0	11.7	11.9	11.6	11.4	11.5	12.6	12.2	12.4	13.6	13.2	13.4
25	12.1	11.8	12.0	12.0	11.5	11.8	12.4	12.2	12.3	13.4	13.1	13.3
26	---	---	---	12.3	12.0	12.1	12.3	12.0	12.2	13.6	13.3	13.5
27	11.1	10.4	10.7	12.2	11.9	12.0	12.0	11.8	11.9	13.8	13.6	13.7
28	11.0	10.3	10.7	12.1	11.8	11.9	11.9	11.6	11.7	13.8	13.6	13.7
29	11.1	10.2	10.6	12.0	11.7	11.8	11.8	11.5	11.7	14.0	13.7	13.9
30	10.7	10	10.3	12.0	11.7	11.8	11.7	11.5	11.6	14.1	13.7	13.9
31	10.5	10	10.2	---	---	---	11.5	11.2	11.4	13.7	13.5	13.6
MONTH	---	---	---	---	---	---	12.6	11.2	11.9	14.1	11.1	12.6
	FEBRUARY			MARCH			APRIL			MAY		
1	13.6	13.3	13.5	12.5	12.0	12.3	11.6	11.3	11.4	11.9	11.4	11.6
2	13.5	13.3	13.4	12.7	12.4	12.6	11.6	11.2	11.4	11.7	11.1	11.4
3	13.4	13.2	13.3	12.7	12.2	12.3	11.5	11.1	11.3	11.7	11.1	11.4
4	13.4	13.2	13.2	12.3	11.9	12.1	11.6	11.1	11.3	12.0	11.4	11.7
5	13.3	13.2	13.3	12.1	11.8	12.0	11.8	11.1	11.5	12.0	11.3	11.7
6	13.2	12.9	13.1	12.3	11.7	11.9	11.8	11.5	11.7	11.9	11.4	11.7
7	12.9	12.6	12.8	12.5	12.0	12.3	11.8	11.5	11.7	12.1	11.5	11.8
8	13.1	12.6	12.9	12.8	11.2	12.3	11.8	11.4	11.6	12.0	11.4	11.8
9	13.1	12.9	13.0	12.5	11.4	12.4	11.7	11.3	11.5	11.7	11.1	11.4
10	13.0	12.7	12.9	12.3	12.1	12.3	11.9	11.6	11.7	11.8	11.2	11.5
11	12.9	12.6	12.8	12.1	11.8	12.0	11.8	11.6	11.7	11.8	11.3	11.5
12	12.8	12.6	12.7	12.2	11.8	11.9	11.8	11.5	11.7	11.5	11.0	11.3
13	12.7	12.5	12.6	12.4	12.2	12.3	11.7	11.5	11.6	11.4	10.8	11.2
14	12.7	12.4	12.6	12.4	12.0	12.2	12.1	11.1	11.5	11.9	11.3	11.6
15	12.7	12.3	12.5	12.2	11.9	12.0	12.1	11.7	12.0	11.6	11.0	11.3
16	12.4	12.1	12.3	12.2	11.9	12.1	12.3	12.1	12.2	11.7	10.8	11.3
17	12.2	12.0	12.1	12.4	12.1	12.2	12.4	12.0	12.2	11.3	10.9	11.1
18	12.1	11.7	11.9	12.2	11.9	12.1	12.2	11.7	12.0	11.2	10.7	11.0
19	11.9	11.7	11.8	11.9	11.4	11.7	11.9	11.4	11.7	11.4	10.9	11.2
20	12.8	11.8	12.2	11.7	11.4	11.5	11.6	11.0	11.3	11.6	11.2	11.4
21	12.4	11.8	12.2	11.6	11.3	11.4	11.3	10.7	11.0	11.7	11.3	11.5
22	12.3	11.8	12.1	11.6	11.3	11.5	11.0	10.5	10.8	11.8	11.5	11.6
23	12.0	11.8	11.9	11.6	11.3	11.4	10.8	10.4	10.6	12.0	11.4	11.8
24	12.3	11.9	12.1	11.6	11.3	11.4	10.9	10.5	10.7	11.6	11.0	11.4
25	12.5	12.1	12.3	11.7	11.4	11.5	---	---	---	11.5	11.2	11.4
26	12.5	12.1	12.3	11.7	11.4	11.5	11.6	11.0	11.3	11.4	11.0	11.2
27	12.4	12.0	12.2	11.6	11.2	11.4	11.8	11.3	11.6	11.3	11.0	11.2
28	12.3	11.9	12.2	11.6	11.3	11.5	12.1	11.6	11.8	11.6	11.2	11.4
29	---	---	---	11.7	11.3	11.5	11.8	11.3	11.6	11.6	11.0	11.3
30	---	---	---	11.7	11.4	11.6	11.6	11.3	11.5	11.3	10.9	11.1
31	---	---	---	11.7	11.3	11.5	---	---	---	11.3	10.9	11.1
MONTH	13.6	11.7	12.6	12.8	11.2	11.9	---	---	---	12.1	10.7	11.4

UMPQUA RIVER BASIN

14316460 NORTH UMPQUA RIVER AT SODA SPRINGS, NEAR TOKETEE FALLS, OR--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.2	10.8	11.1	---	---	---	10.5	9.9	10.2	11.5	10.6	10.9
2	11.4	11.0	11.2	---	---	---	10.6	10.1	10.3	11.1	10.6	10.7
3	11.5	11.0	11.3	---	---	---	10.7	9.9	10.3	11.1	10.5	10.7
4	11.3	11.0	11.1	---	---	---	10.8	10.2	10.5	11.2	10.6	10.8
5	11.7	10.8	11.0	---	---	---	11.0	10.5	10.7	11.4	10.7	11.0
6	11.2	10.8	11.0	---	---	---	11.1	10.6	10.8	11.7	10.8	11.0
7	11.5	10.9	11.3	---	---	---	11.1	10.4	10.7	11.8	10.9	11.2
8	11.9	11.3	11.6	---	---	---	11.1	10.5	10.8	11.7	11.0	11.3
9	12.0	11.7	11.8	---	---	---	11.0	10.4	10.7	12.1	11.0	11.3
10	11.9	11.3	11.6	---	---	---	10.9	10.4	10.6	11.7	10.9	11.1
11	11.6	11.2	11.4	---	---	---	10.8	10.2	10.5	11.3	10.7	10.9
12	11.4	11.0	11.2	---	---	---	10.8	10.2	10.4	11.3	10.6	10.8
13	11.2	10.8	11.0	---	---	---	10.8	10.2	10.4	11.2	10.5	10.7
14	11.1	10.8	11.0	---	---	---	10.8	9.8	10.3	11.2	10.6	10.8
15	11.1	10.8	11.0	---	---	---	10.9	10.1	10.4	11.3	10.6	10.9
16	11.1	10.8	11.0	---	---	---	11.0	10.1	10.4	11.5	10.7	11.0
17	11.1	10.8	11.0	---	---	---	11.1	10.2	10.5	11.3	10.8	10.9
18	11.2	11.1	11.1	---	---	---	11.1	10.4	10.6	11.3	10.7	10.9
19	11.7	11.1	11.3	---	---	---	11.2	10.6	10.8	11.2	10.7	10.9
20	11.4	11.0	11.2	---	---	---	11.2	10.6	10.8	11.3	10.8	10.9
21	11.2	10.9	11.0	---	---	---	11.4	10.6	10.9	11.3	10.8	11.0
22	11.2	10.9	11.0	---	---	---	11.3	10.6	10.9	11.4	10.8	11.0
23	---	---	---	---	---	---	11.3	10.6	10.8	11.3	10.9	11.0
24	---	---	---	---	---	---	11.3	10.6	10.9	11.4	10.8	11.0
25	---	---	---	---	---	---	11.3	10.7	10.9	11.3	10.5	10.9
26	---	---	---	---	---	---	11.4	10.6	10.9	11.4	10.8	11.0
27	---	---	---	---	---	---	11.3	10.5	10.8	11.5	10.8	11.1
28	---	---	---	---	---	---	11.0	10.4	10.7	11.4	10.9	11.1
29	---	---	---	---	---	---	11.0	10.4	10.6	11.7	11.0	11.2
30	---	---	---	---	---	---	11.1	10.4	10.6	11.9	11.2	11.5
31	---	---	---	---	---	---	11.4	10.5	10.8	---	---	---
MONTH	---	---	---	---	---	---	11.4	9.8	10.6	12.1	10.5	11.0

TURBIDITY (NTU), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
1	<1	<1	<1	4	1	2	16	9	13	2	2	2
2	<1	<1	<1	4	1	2	26	13	15	4	2	3
3	<1	<1	<1	5	2	3	18	9	11	3	1	2
4	1	<1	<1	7	2	4	20	6	8	29	2	20
5	<1	<1	<1	8	1	2	26	6	8	---	---	---
6	1	<1	<1	19	2	6	32	4	5	---	---	---
7	<1	<1	<1	23	5	13	4	2	3	20	15	20
8	<1	<1	<1	28	2	7	2	2	2	---	---	---
9	<1	<1	<1	28	<1	<1	2	1	2	---	---	---
10	<1	<1	<1	<1	<1	<1	2	<1	1	---	---	---
11	<1	<1	<1	<1	<1	<1	1	<1	1	---	---	---
12	<1	<1	<1	2	<1	<1	1	<1	1	---	---	---
13	2	<1	<1	4	<1	2	40	<1	1	---	---	---
14	<1	<1	<1	2	<1	1	40	7	13	---	---	---
15	<1	<1	<1	1	<1	<1	7	3	4	---	---	---
16	<1	<1	<1	1	<1	<1	4	2	3	36	15	22
17	<1	<1	<1	1	<1	<1	7	4	5	---	---	---
18	<1	<1	<1	1	<1	<1	4	3	4	---	---	---
19	<1	<1	<1	<1	<1	<1	4	2	2	---	---	---
20	<1	<1	<1	1	1	1	4	1	2	---	---	---
21	1	<1	<1	2	<1	<1	5	1	2	---	---	---
22	<1	<1	<1	6	1	4	2	1	1	---	---	---
23	2	<1	<1	3	1	2	2	<1	1	---	---	---
24	1	<1	<1	2	<1	<1	3	<1	2	---	---	---
25	<1	<1	<1	2	<1	<1	2	<1	1	---	---	---
26	1	<1	<1	1	<1	<1	<1	<1	<1	5	2	3
27	<1	<1	<1	10	1	4	<1	<1	<1	3	2	2
28	1	<1	<1	40	3	7	2	<1	1	2	1	1
29	2	<1	<1	42	18	25	1	<1	1	2	1	1
30	4	<1	<1	25	10	14	2	<1	1	1	<1	1
31	4	1	2	---	---	---	2	1	2	1	<1	1
MAX	4	1	2	42	18	25	40	13	15	---	---	---
MIN	<1	<1	<1	<1	<1	<1	<1	<1	<1	---	---	---

14316460 NORTH UMPQUA RIVER AT SODA SPRINGS, NEAR TOKETEE FALLS, OR--Continued

TURBIDITY (NTU), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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

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

UMPQUA RIVER BASIN

14316495 BOULDER CREEK NEAR TOKETE FALLS, OR

LOCATION.--Lat 43°18'13", long 122°31'45", in NE 1/4 SW 1/4 sec.13, T.26 S., R.2 E., Douglas County, Hydrologic Unit 17100301, Umpqua National Forest, and at mile 0.1.

DRAINAGE AREA.--30.4 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1997 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,640 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good.

AVERAGE DISCHARGE.--5 years (water years 1998-2002), 95.3 ft³/s, 42.60 in/yr, 69,060 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,370 ft³/s Nov. 21, 1998, gage height, 6.98 ft; minimum discharge, 1.9 ft³/s Oct. 5-8, 2001.

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	2330	1,170	5.65	Jan. 8	0800	962	5.36
Dec. 17	0600	731	4.98	Apr. 14	0930	*1,290	*5.80

Minimum discharge, 1.9 ft³/s Oct. 5-8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	23	112	373	61	e125	191	94	111	25	8.0	4.4
2	2.2	18	114	451	63	103	214	109	93	23	7.7	4.4
3	2.1	14	90	347	65	88	241	117	81	22	7.6	4.3
4	2.0	11	73	241	70	81	254	108	74	21	7.5	4.4
5	1.9	9.9	69	187	79	81	269	103	72	20	7.5	4.3
6	1.9	8.9	259	477	73	99	235	96	68	20	7.6	4.5
7	2.0	8.0	237	502	147	148	201	87	60	19	7.4	5.7
8	2.0	7.3	158	750	229	117	175	81	53	18	7.1	4.9
9	2.4	6.8	132	492	158	98	189	77	47	17	6.8	4.7
10	2.4	6.3	107	307	136	87	234	71	44	17	6.6	4.6
11	14	5.9	88	235	144	105	245	68	43	16	6.3	4.5
12	6.4	6.6	79	234	137	276	241	76	42	16	6.1	4.3
13	4.3	11	326	194	141	226	311	91	43	15	5.8	4.3
14	3.5	26	645	160	152	179	967	88	42	14	5.4	4.2
15	3.1	17	264	131	150	153	538	88	41	14	5.1	4.1
16	2.8	31	416	107	169	131	344	91	39	13	5.0	4.1
17	2.5	48	579	89	182	109	268	e105	43	13	4.9	12
18	2.4	28	317	78	161	89	222	e100	74	13	4.9	24
19	2.4	22	221	73	214	86	193	95	50	12	4.9	7.6
20	2.4	23	189	72	265	119	178	87	43	12	5.0	6.2
21	2.3	93	161	101	343	206	161	83	40	11	5.4	5.5
22	16	229	134	88	385	272	151	77	38	11	5.1	5.1
23	49	154	101	75	407	347	145	69	35	11	4.9	4.9
24	18	98	84	68	322	360	130	68	33	10	4.8	4.7
25	12	86	78	134	235	280	130	73	31	10	4.8	4.6
26	8.9	73	75	194	186	225	132	85	30	9.8	4.8	4.5
27	7.4	57	93	133	e165	197	120	96	28	9.5	4.7	4.4
28	7.3	86	195	96	e145	174	100	115	27	9.1	4.6	4.4
29	7.6	130	200	76	---	168	93	138	29	8.8	4.5	4.5
30	19	92	243	65	---	169	97	141	26	8.6	4.5	7.1
31	32	---	432	58	---	177	---	127	---	8.3	4.4	---
TOTAL	244.6	1429.7	6271	6588	4984	5075	6969	2904	1480	447.1	179.7	171.2
MEAN	7.89	47.7	202	213	178	164	232	93.7	49.3	14.4	5.80	5.71
MAX	49	229	645	750	407	360	967	141	111	25	8.0	24
MIN	1.9	5.9	69	58	61	81	93	68	26	8.3	4.4	4.1
AC-FT	485	2840	12440	13070	9890	10070	13820	5760	2940	887	356	340
CFSM	0.26	1.57	6.65	6.99	5.86	5.39	7.64	3.08	1.62	0.47	0.19	0.19
IN.	0.30	1.75	7.67	8.06	6.10	6.21	8.53	3.55	1.81	0.55	0.22	0.21

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2002, BY WATER YEAR (WY)

	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002		
MEAN	18.8	76.7	151	203	158	148	152	142	67.5	17.5	7.22	4.77
MAX	60.3	189	239	311	256	181	232	287	144	34.6	13.1	7.16
(WY)	1998	1999	1999	1999	1999	1999	2002	1999	1999	1999	1999	1999
MIN	7.89	22.3	63.3	36.3	41.9	92.0	83.8	84.0	18.6	7.95	4.15	3.08
(WY)	2002	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1998 - 2002

ANNUAL TOTAL	19238.6	36743.3		
ANNUAL MEAN	52.7	101	95.3	
HIGHEST ANNUAL MEAN			155	1999
LOWEST ANNUAL MEAN			38.8	2001
HIGHEST DAILY MEAN	645	Dec 14	967	Apr 14
LOWEST DAILY MEAN	1.9	Oct 5	1.9	Oct 5
ANNUAL SEVEN-DAY MINIMUM	2.0	Oct 2	2.0	Oct 2
ANNUAL RUNOFF (AC-FT)	38160	72880	69060	
ANNUAL RUNOFF (CFSM)	1.73	3.31	3.14	
ANNUAL RUNOFF (INCHES)	23.54	44.96	42.60	
10 PERCENT EXCEEDS	118	241	232	
50 PERCENT EXCEEDS	28	73	60	
90 PERCENT EXCEEDS	3.1	4.5	4.8	

e Estimated

14316495 BOULDER CREEK NEAR TOKETEE FALLS, OR--Continued

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: February 1999 to current year.

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

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum, 22.1°C July 13, 2002; minimum, 1.2°C Jan. 17, Feb. 13, 2001.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 22.1°C July 13; minimum, 2.1°C Jan. 20.

WATER TEMPERATURE, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	13.4	11.6	12.4	9.8	9.4	9.6	6.1	5.5	5.8	6.6	6.2	6.4
2	13.5	11.9	12.6	9.6	9.1	9.4	6.4	5.8	6.1	6.8	6.3	6.6
3	13.4	11.8	12.5	9.1	8.1	8.4	6.1	5.4	5.7	6.4	5.8	6.2
4	13.5	11.8	12.6	8.1	7.3	7.7	5.5	4.3	4.8	5.9	5.2	5.6
5	13.1	11.7	12.4	8.2	7.4	7.8	4.3	2.6	3.4	6.2	5.6	5.9
6	13.2	11.9	12.4	8.0	6.8	7.6	6.1	4.0	5.0	6.7	6.0	6.4
7	12.1	11.0	11.6	6.8	5.7	6.1	6.3	5.8	6.1	6.7	6.5	6.6
8	11.5	10.6	11.1	5.7	4.8	5.2	6.0	5.5	5.8	6.9	6.3	6.6
9	11.3	10.2	10.6	5.7	4.8	5.3	5.8	5.2	5.6	6.3	5.6	6.0
10	10.2	9.2	9.8	6.3	5.5	5.9	5.2	4.1	4.5	6.2	5.4	5.8
11	10.4	9.7	10.1	7.4	6.3	6.9	4.7	4.2	4.5	6.4	5.5	5.9
12	9.9	8.8	9.5	8.2	7.4	7.8	4.8	4.4	4.6	6.2	5.9	6.1
13	10.9	9.7	10.2	8.2	8.0	8.1	6.0	4.7	5.2	5.9	5.0	5.3
14	10.4	9.2	9.9	8.9	8.2	8.5	6.4	5.6	6.0	5.1	4.4	4.6
15	10.6	9.4	10.0	8.8	8.5	8.6	5.6	5.4	5.5	4.4	3.4	3.7
16	11.0	9.9	10.4	8.8	8.3	8.6	6.4	5.5	6.0	3.6	2.6	3.1
17	10.5	9.3	9.9	8.3	6.7	7.6	6.8	6.2	6.5	3.5	3.2	3.4
18	9.3	8.0	8.6	6.7	5.9	6.2	6.2	5.7	6.0	3.9	3.4	3.6
19	9.2	7.9	8.6	7.8	6.4	7.1	5.9	5.6	5.8	3.8	3.0	3.3
20	9.6	8.4	8.9	7.8	7.5	7.6	5.8	5.4	5.6	3.3	2.1	2.6
21	9.1	8.1	8.7	7.5	7.3	7.3	5.4	4.8	5.0	3.1	2.6	2.9
22	9.4	8.8	9.0	7.7	7.2	7.5	5.4	4.7	5.0	3.5	3.1	3.2
23	9.4	8.3	8.9	7.3	7.0	7.1	5.1	4.4	4.8	3.5	3.0	3.2
24	8.3	7.4	7.8	7.0	5.7	6.4	4.4	3.9	4.1	3.7	3.2	3.4
25	7.6	7.0	7.4	5.7	4.8	5.1	4.9	4.2	4.5	4.3	3.6	3.9
26	7.8	7.0	7.5	5.4	4.9	5.1	5.1	4.4	4.7	4.9	4.2	4.5
27	8.1	7.2	7.7	5.2	4.7	4.9	5.5	4.7	5.0	4.2	3.7	3.9
28	8.4	7.7	8.1	5.3	4.1	4.6	5.9	5.3	5.5	3.9	3.2	3.4
29	9.0	8.4	8.7	5.9	5.3	5.7	6.3	5.4	5.9	3.2	2.2	2.6
30	9.5	8.9	9.2	5.8	5.6	5.7	6.4	5.6	6.0	3.0	2.3	2.6
31	9.6	9.2	9.4	---	---	---	6.6	6.2	6.3	3.3	2.7	3.0
MONTH	13.5	7.0	9.9	9.8	4.1	7.0	6.8	2.6	5.3	6.9	2.1	4.5

UMPQUA RIVER BASIN

14316495 BOULDER CREEK NEAR TOKETEE FALLS, OR--Continued

WATER TEMPERATURE, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	3.7	3.1	3.4	4.0	---	---	7.0	5.0	6.0	7.2	6.7	6.9
2	3.7	3.1	3.4	4.2	3.0	3.5	7.3	5.1	6.1	9.0	6.2	7.4
3	4.1	3.6	3.8	4.4	3.1	3.9	7.6	5.4	6.4	9.3	6.8	8.0
4	3.9	3.3	3.6	4.4	3.6	4.0	7.4	5.6	6.4	8.3	6.4	7.5
5	4.2	3.5	3.8	4.9	3.6	4.2	7.5	5.6	6.5	8.2	5.1	6.7
6	4.5	3.9	4.2	4.9	4.0	4.4	6.9	6.2	6.5	7.8	5.9	6.9
7	4.9	4.3	4.5	5.3	4.8	5.0	6.8	6.0	6.4	7.6	5.9	6.7
8	5.3	4.4	4.8	5.1	3.3	4.2	7.1	5.8	6.4	6.8	4.5	5.8
9	5.1	4.3	4.7	3.6	2.8	3.2	7.4	5.3	6.3	7.2	3.9	5.5
10	5.2	4.3	4.7	4.2	3.1	3.6	7.2	6.3	6.6	7.1	5.6	6.4
11	5.4	4.5	4.9	4.5	3.9	4.2	7.0	6.1	6.5	6.8	5.2	6.1
12	5.2	4.2	4.7	5.4	4.5	4.9	7.1	6.2	6.6	8.6	5.0	6.8
13	5.4	4.6	4.9	5.4	4.4	5.0	7.6	6.2	6.8	10.0	6.5	8.2
14	5.1	4.1	4.6	4.6	4.2	4.4	7.2	6.6	6.8	9.4	7.4	8.1
15	5.3	4.3	4.8	4.7	4.1	4.4	7.1	5.3	6.2	9.0	6.0	7.5
16	5.7	4.8	5.2	4.5	3.9	4.2	5.5	4.7	5.1	8.6	6.2	7.6
17	5.8	4.7	5.2	3.9	2.9	3.5	5.0	4.5	4.7	10.2	5.9	8.3
18	5.9	5.2	5.5	3.2	2.4	2.9	5.3	4.3	4.7	9.2	7.7	8.5
19	5.6	5.4	5.4	3.5	2.9	3.2	6.1	4.4	5.1	8.3	7.4	7.8
20	6.3	5.4	5.8	4.6	3.4	3.9	6.9	4.9	5.7	8.4	7.0	7.7
21	6.6	5.8	6.1	5.3	3.9	4.5	7.4	5.1	6.1	7.8	6.7	7.3
22	6.6	5.6	6.0	6.2	4.7	5.3	7.9	4.9	6.3	7.5	6.3	6.9
23	6.4	5.9	6.1	6.1	5.1	5.6	8.4	5.4	6.8	9.0	5.4	7.1
24	6.0	5.2	5.7	6.2	5.4	5.7	7.5	5.6	6.6	9.5	7.2	8.4
25	5.5	4.6	5.0	6.3	5.2	5.7	8.1	4.6	6.3	10.4	8.0	9.2
26	5.8	4.6	5.1	6.5	5.0	5.7	8.6	5.9	7.2	10.9	8.7	9.9
27	---	---	---	6.8	5.1	5.9	7.6	5.8	6.6	10.2	8.9	9.4
28	---	---	---	6.7	5.6	6.1	6.4	5.3	5.8	9.6	8.7	9.2
29	---	---	---	6.8	5.2	6.0	6.9	4.4	5.6	12.0	8.8	10.1
30	---	---	---	6.9	5.1	6.0	7.3	5.2	6.3	11.7	9.1	10.3
31	---	---	---	6.9	4.9	5.9	---	---	---	11.1	8.9	10.0
MONTH	---	---	---	6.9	---	---	8.6	4.3	6.2	12.0	3.9	7.8
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	10.5	9.2	9.9	17.0	14.4	15.6	19.6	17.0	18.3	17.7	15.0	16.3
2	10.5	8.6	9.6	17.3	14.4	15.7	18.9	16.2	17.6	17.3	15.4	16.4
3	10.7	8.0	9.5	16.6	14.4	15.4	17.4	15.5	16.5	16.7	15.3	16.0
4	12.4	9.2	10.7	16.3	14.0	14.9	16.3	14.9	15.5	15.7	14.2	14.9
5	12.6	10.2	11.4	16.6	13.5	14.9	15.5	13.7	14.6	14.7	13.2	14.0
6	11.8	9.5	10.8	17.4	14.3	15.7	15.5	13.2	14.3	14.4	12.3	13.2
7	10.6	8.1	9.5	17.1	15.3	16.1	15.8	12.8	14.3	13.9	12.0	12.8
8	9.4	7.6	8.1	17.5	14.6	15.9	16.3	13.3	14.8	12.9	11.2	12.2
9	9.6	7.3	8.3	18.3	14.6	16.4	17.2	14.0	15.6	14.1	11.4	12.6
10	10.8	7.7	9.4	20.0	16.2	17.9	18.3	15.2	16.7	14.5	12.1	13.3
11	12.6	9.5	11.1	21.2	17.6	19.2	18.9	15.9	17.3	15.2	12.8	13.9
12	13.7	10.8	12.4	21.4	18.4	19.9	19.1	15.9	17.6	15.7	13.4	14.5
13	14.6	11.8	13.4	22.1	19.1	20.3	20.0	16.8	18.3	16.1	13.8	14.9
14	14.5	12.1	13.6	20.8	18.1	19.4	20.4	17.4	18.8	16.1	14.3	15.2
15	14.5	12.0	13.5	20.1	17.3	18.7	20.1	17.3	18.7	15.5	14.2	14.9
16	14.3	12.4	13.5	19.9	17.0	18.5	19.8	16.8	18.2	15.6	13.8	14.6
17	13.7	11.3	12.3	20.1	17.2	18.6	18.7	16.9	17.8	14.8	13.9	14.3
18	11.6	10.8	11.2	19.6	17.2	18.4	17.4	15.6	16.6	14.5	13.3	13.9
19	12.3	9.1	10.8	19.8	17.2	18.4	17.4	15.4	16.3	14.5	12.7	13.6
20	13.5	10.7	12.2	19.8	16.6	18.2	16.5	15.3	15.9	14.6	12.7	13.6
21	14.3	11.8	13.2	19.6	16.6	18.3	17.1	14.8	15.8	14.4	12.3	13.3
22	15.0	12.8	13.9	19.3	17.6	18.6	16.9	14.6	15.7	14.5	12.4	13.3
23	15.5	13.1	14.4	20.6	17.8	19.2	17.0	14.7	15.8	14.7	12.4	13.4
24	15.6	13.1	14.5	20.2	18.1	19.2	16.8	14.9	15.9	14.6	12.4	13.4
25	16.5	13.8	15.2	19.9	17.9	18.9	17.5	15.5	16.4	14.3	12.1	13.1
26	17.2	14.9	16.1	20.3	17.4	18.9	18.1	15.7	16.7	13.7	11.7	12.7
27	17.0	15.4	16.3	20.1	17.5	18.8	17.7	15.2	16.4	13.4	11.3	12.3
28	16.6	15.5	16.0	19.8	16.6	18.3	18.4	15.6	16.9	13.2	11.2	12.1
29	17.1	15.1	15.9	20.3	17.2	18.8	18.7	16.2	17.3	12.0	11.2	11.5
30	16.8	15.1	15.9	20.5	17.8	19.1	18.5	16.3	17.1	11.2	10.2	10.8
31	---	---	---	20.5	18.0	19.1	17.3	14.7	16.0	---	---	---
MONTH	17.2	7.3	12.4	22.1	13.5	17.9	20.4	12.8	16.6	17.7	10.2	13.7

14316500 NORTH UMPQUA RIVER ABOVE COPELAND CREEK, NEAR TOKETEE FALLS, OR

LOCATION.--Lat 43°17'45", long 122°32'10", in NW 1/4 sec.24, T.26 S., R.2 E., Douglas County, Hydrologic Unit 17100301, Umpqua National Forest, on left bank 0.6 mi upstream from Copeland Creek, 4.7 mi west of town of Toketee Falls, and at mile 67.2.

DRAINAGE AREA.--475 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1949 to current year. Monthly discharge only September 1949, published in WSP 1318. Prior to October 1952, published as "above Copeland Creek."

REVISED RECORDS.--WSP 1448: 1953(M), 1954, drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 1,580 ft above NGVD of 1929, from river-profile map. Prior to Aug. 1, 1976, on right bank at same datum.

REMARKS.--Records good. Considerable fluctuation caused by powerplants upstream; flow slightly regulated by Diamond Lake and by Lemolo Lake (station 14313000). No diversion upstream from station. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--53 years (water years 1950-2002), 1,471 ft³/s, 1,066,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,700 ft³/s Dec. 22, 1964, gage height, 19.1 ft, from floodmark, from rating curve extended above 7,200 ft³/s on basis of slope-area measurement of peak flow; minimum discharge, 345 ft³/s July 24, 1992; minimum daily, 565 ft³/s Sept. 13, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum recorded discharge, 4,680 ft³/s Jan. 8, gage height, 8.92 ft, but may have been higher during period of missing record; minimum discharge, 654 ft³/s Oct. 10.

DISCHARGE, in CFS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	698	817	1040	e1850	1110	1440	1530	1490	1750	912	761	672
2	697	814	1050	2050	1090	1260	1640	1510	1600	900	760	670
3	696	812	1000	2130	1080	1200	1790	1560	1530	902	760	670
4	672	809	956	1860	1060	1170	1940	1620	1470	916	760	671
5	678	810	916	1550	1040	1180	2210	1610	1440	951	759	674
6	679	810	1330	2290	1060	1250	2200	1580	1410	927	759	694
7	678	813	1280	2810	1290	1430	2130	1560	1400	876	758	706
8	678	812	1020	4000	1530	1380	2000	1540	1370	866	745	704
9	676	814	1000	3190	1360	1240	2010	1480	1310	866	714	699
10	670	841	986	2230	1250	1200	2500	1430	1230	870	715	690
11	689	843	984	1910	1270	1330	2550	1390	1180	888	713	684
12	697	858	1010	1740	1220	1650	e2500	1410	1180	892	713	684
13	714	871	1550	1710	1160	1680	e2600	1460	1160	887	713	687
14	702	881	2950	1710	1220	1590	e4600	1530	1150	874	715	683
15	704	850	1840	1560	1190	1550	e4200	1550	1180	860	718	683
16	706	842	2020	1430	1190	1400	e3400	1530	1190	849	720	684
17	712	846	2390	1450	1230	1240	e3000	1550	1230	827	720	697
18	721	818	1840	1460	1250	1220	e2600	1570	1420	833	716	698
19	722	813	1670	1440	1450	1280	e2400	1580	1470	825	715	699
20	729	810	1540	1370	1670	1240	e2200	1560	1230	804	712	707
21	728	885	1420	1390	1900	1330	e2000	1550	1110	805	711	711
22	743	1350	1330	1260	2010	1500	e1850	1530	1050	806	709	711
23	780	1130	1150	1120	2200	1630	e1850	1440	1020	802	701	712
24	748	956	1040	1140	2120	1790	e1750	1350	1050	803	696	718
25	754	942	1030	1370	1870	1770	e1700	1270	1050	794	696	723
26	758	960	1050	1560	1760	1710	e1700	1310	1080	787	696	732
27	756	1040	979	1350	1690	1640	1680	1380	1030	774	695	726
28	753	1100	1160	1230	1590	1520	1620	1510	1040	768	701	725
29	754	1100	1220	1110	---	1500	1560	1760	1010	770	699	725
30	777	1010	1280	1070	---	1480	1520	2020	949	766	686	729
31	814	---	1720	1110	---	1470	---	1840	---	759	673	---
TOTAL	22283	27057	41751	53450	39860	44270	67230	47470	37289	26159	22309	20968
MEAN	718.8	901.9	1347	1724	1424	1428	2241	1531	1243	843.8	719.6	698.9
MAX	814	1350	2950	4000	2200	1790	4600	2020	1750	951	761	732
MIN	670	809	916	1070	1040	1170	1520	1270	949	759	673	670
AC-FT	44200	53670	82810	106000	79060	87810	133400	94160	73960	51890	44250	41590

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2002, BY WATER YEAR (WY)

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	925.9	1276	1770	1806	1823	1758	1870	2009	1639	1069	884.1	850.8																																									
MAX	1568	2324	5163	3592	3462	4221	2876	3191	2933	1652	1178	1107																																									
(WY)	1951	1997	1965	1997	1996	1972	1952	1956	1974	1953	1972	1972																																									
MIN	661	754	803	788	670	873	1065	855	700	664	598	612																																									
(WY)	1995	1988	1977	1977	1977	1977	1968	1992	1992	1992	1992	1994																																									

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1950 - 2002
ANNUAL TOTAL	339550	450096	
ANNUAL MEAN	930.3	1233	1471
HIGHEST ANNUAL MEAN			2080
LOWEST ANNUAL MEAN			897
HIGHEST DAILY MEAN	2950	Dec 14	4600
LOWEST DAILY MEAN	639	Sep 7	670
ANNUAL SEVEN-DAY MINIMUM	642	Sep 3	674
ANNUAL RUNOFF (AC-FT)	673500		892800
10 PERCENT EXCEEDS	1220		1850
50 PERCENT EXCEEDS	880		1110
90 PERCENT EXCEEDS	677		700

e Estimated

14316500 NORTH UMPQUA RIVER ABOVE COPELAND CREEK, NEAR TOKETEE FALLS, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 1998 to current year.
 pH: June 1998 to current year.
 TEMPERATURE: June 1998 to current year.
 DISSOLVED OXYGEN: June 1998 to current year.
 TURBIDITY: June 2000 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Records good. Seasonal records only (June to September).

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE FOR PERIOD JUNE TO SEPTEMBER: Maximum recorded, 69 microsiemens Sept. 24, 25, 2001; minimum recorded, 35 microsiemens June 15, 1999.
 pH FOR PERIOD JUNE TO SEPTEMBER: Maximum recorded, 8.4 units July 28-30, 2001, July 30, Aug. 13, 2002; minimum recorded, 7.1 units Aug. 22, 1998.
 TEMPERATURE FOR PERIOD JUNE TO SEPTEMBER: Maximum recorded, 15.8°C Aug. 11, 2001; minimum recorded, 6.5°C June 9, 1999.
 DISSOLVED OXYGEN FOR PERIOD JUNE TO SEPTEMBER: Maximum recorded, 12.6 mg/L June 8, 9, 1999; minimum recorded, 6.6 mg/L July 30, 1998.
 TURBIDITY FOR PERIOD JUNE TO SEPTEMBER: Maximum recorded, 89 NTU June 22, 2001; minimum recorded, <1 many days most years.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE FOR PERIOD JUNE TO SEPTEMBER: Maximum recorded, 65 microsiemens several days in July and August; minimum recorded, 49 microsiemens June 1, 2.
 pH FOR PERIOD JUNE TO SEPTEMBER: Maximum recorded, 8.4 units July 30, Aug. 13; minimum recorded, 7.6 units June 10, 17, 18, July 11, 12.
 TEMPERATURE FOR PERIOD JUNE TO SEPTEMBER: Maximum recorded, 15.7°C July 13; minimum recorded, 5.7°C Apr. 28.
 DISSOLVED OXYGEN FOR PERIOD JUNE TO SEPTEMBER: Maximum recorded, 11.7 mg/L June 9, Sept. 30, minimum recorded, 9.8 mg/L July 12, 13.
 TURBIDITY FOR PERIOD JUNE TO SEPTEMBER: Maximum recorded, 20 NTU July 7; minimum recorded, <1 NTU many days during June, July, August, and September.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), JUNE TO SEPTEMBER 2002

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	50	49	50	62	60	60	64	61	62	63	62	62
2	50	49	50	62	60	61	64	62	63	63	62	62
3	52	50	51	62	61	61	64	61	62	63	62	62
4	52	51	51	62	61	61	64	62	63	63	61	62
5	52	50	51	63	61	62	64	62	63	63	62	62
6	51	50	50	62	61	62	64	61	63	63	61	62
7	52	50	51	63	61	62	64	61	62	63	61	62
8	53	51	52	63	62	62	64	61	63	63	61	62
9	54	52	53	63	63	63	64	62	63	63	61	62
10	55	53	54	63	63	63	64	62	63	64	61	62
11	56	54	55	63	63	63	64	62	63	63	62	62
12	56	54	55	63	63	63	64	62	63	63	62	62
13	56	55	55	63	62	63	65	63	63	63	62	62
14	56	54	55	63	62	63	65	63	64	63	61	62
15	56	54	55	63	62	63	65	63	63	62	61	61
16	56	55	55	63	62	63	65	63	63	62	61	61
17	57	55	55	63	62	63	65	63	64	62	61	62
18	55	52	53	63	62	63	65	63	64	62	59	60
19	55	53	54	64	62	63	64	62	63	62	60	60
20	55	54	55	64	62	63	64	62	63	62	60	61
21	57	55	56	64	63	63	63	61	62	62	60	60
22	58	55	56	64	62	63	63	61	62	61	60	60
23	58	56	57	64	63	63	63	61	62	61	60	60
24	59	57	58	64	62	63	63	61	62	61	60	60
25	59	58	59	64	62	63	62	60	61	62	60	61
26	60	58	59	64	63	63	62	60	61	63	61	62
27	61	59	60	65	63	63	62	61	61	63	61	62
28	60	59	60	64	63	63	63	61	62	63	61	62
29	61	59	60	65	63	63	63	61	62	63	61	62
30	61	59	60	65	63	64	63	61	62	62	61	62
31	---	---	---	65	62	63	63	61	62	---	---	---
MONTH	61	49	55	65	60	63	65	60	63	64	59	61

14316500 NORTH UMPQUA RIVER ABOVE COPELAND CREEK, NEAR TOKETEE FALLS, OR--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, JUNE TO SEPTEMBER 2002

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

TEMPERATURE, WATER (DEG. C), JUNE TO SEPTEMBER 2002

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

UMPQUA RIVER BASIN

14316500 NORTH UMPQUA RIVER ABOVE COPELAND CREEK, NEAR TOKETEE FALLS, OR--Continued

OXYGEN DISSOLVED (MG/L), JUNE TO SEPTEMBER 2002

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.3	10.9	11.2	10.5	10	10.3	10.4	10.0	10.2	10.9	10.5	10.7
2	11.6	11.2	11.4	10.4	10.1	10.3	10.5	10.3	10.4	10.8	10.4	10.6
3	11.6	11.3	11.5	10.5	10.3	10.4	10.6	10.3	10.4	10.8	10.5	10.6
4	11.5	11.2	11.3	10.6	10.4	10.5	10.9	10.5	10.7	11.0	10.6	10.8
5	11.3	11.1	11.2	10.7	10.4	10.5	11.0	10.8	10.9	11.1	10.8	11.0
6	11.3	10.7	11.0	10.6	10.3	10.5	11.1	10.8	10.9	11.2	10.9	11.1
7	11.1	10.7	11.0	10.5	10.3	10.4	11.0	10.7	10.8	11.4	11.1	11.2
8	11.5	11.0	11.3	10.6	10.4	10.5	11.0	10.7	10.8	11.5	11.2	11.3
9	11.7	11.3	11.5	10.6	10.3	10.4	10.8	10.5	10.7	11.4	11.1	11.3
10	11.4	10.9	11.2	10.5	10.2	10.3	10.6	10.3	10.5	11.2	10.9	11.1
11	11.1	10.7	10.9	10.3	10.0	10.2	10.5	10.2	10.4	11.3	10.6	10.9
12	10.9	10.5	10.7	10.3	9.8	10.0	10.5	10.2	10.3	10.8	10.5	10.7
13	10.7	10.4	10.5	10.2	9.8	9.9	10.4	10.0	10.3	10.8	10.4	10.6
14	10.6	10.3	10.5	10.2	9.9	10.0	10.4	10.1	10.2	10.8	10.5	10.6
15	10.7	10.4	10.5	10.3	9.9	10.1	10.4	10.1	10.3	10.9	10.5	10.7
16	10.7	10.5	10.6	10.4	10.1	10.2	10.5	10.2	10.3	11.1	10.7	10.9
17	11.0	10.5	10.8	10.4	10.1	10.2	10.7	10.3	10.5	11.1	10.7	10.9
18	11.2	10.8	11.0	10.4	10.1	10.3	10.8	10.5	10.6	11.1	10.8	10.9
19	11.1	10.6	10.9	10.4	10.1	10.3	10.9	10.6	10.7	11.1	10.7	10.9
20	10.8	10.4	10.6	10.3	10	10.1	10.9	10.7	10.8	11.0	10.8	10.9
21	10.5	10.3	10.4	10.3	10.0	10.1	11.0	10.6	10.8	11.1	10.8	10.9
22	10.6	10.3	10.4	10.3	10	10.1	10.9	10.6	10.7	11.1	10.8	11.0
23	10.4	10.1	10.3	10.4	10.0	10.2	10.9	10.6	10.7	11.1	10.8	10.9
24	10.4	10.2	10.3	10.3	10.0	10.2	10.9	10.6	10.7	11.1	10.8	10.9
25	10.5	10.2	10.3	10.5	10.2	10.3	11.0	10.6	10.8	11.1	10.8	10.9
26	10.4	10.1	10.2	10.5	10.2	10.3	10.9	10.5	10.7	11.1	10.8	10.9
27	10.3	10.0	10.2	10.4	10.1	10.3	10.8	10.4	10.6	11.2	10.9	11.0
28	10.3	10.1	10.2	10.5	10.2	10.3	10.6	10.2	10.5	11.2	10.9	11.0
29	10.5	10.2	10.3	10.5	10.2	10.3	10.6	10.3	10.5	11.3	11.0	11.2
30	10.5	10.2	10.3	10.4	10.1	10.2	10.7	10.3	10.5	11.7	11.2	11.4
31	---	---	---	10.3	10.1	10.2	10.8	10.5	10.6	---	---	---
MONTH	11.7	10.0	10.8	10.7	9.8	10.3	11.1	10.0	10.6	11.7	10.4	10.9

TURBIDITY (NTU), JUNE TO SEPTEMBER 2002

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

14316700 STEAMBOAT CREEK NEAR GLIDE, OR

LOCATION.--Lat 43°21'00", long 122°43'40", in N 1/2 sec.32, T.25-1/2 S., R.1 E., Douglas County, Hydrologic Unit 17100301, in Umpqua National Forest, on right bank in Canton Creek in Canton Creek Forest Service Park, 200 ft downstream from Canton Creek, 19 mi northeast of Glide, and at mile 0.5.

DRAINAGE AREA.--227 mi².

PERIOD OF RECORD.--Annual maximum, water year 1956, June 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,128.55 ft above NGVD of 1929 (levels by Federal Highway Administration). October 1955 to June 1956, nonrecording gage at site 100 ft upstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. No regulation or diversion upstream from station. National Weather Service satellite telemeter at station.

AVERAGE DISCHARGE.--46 years (water years 1957-2002), 732 ft³/s, 43.81 in/yr, 530,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 51,000 ft³/s Dec. 22, 1964, gage height, 25.6 ft, from floodmark, from rating curve extended above 13,000 ft³/s on basis of slope-area measurement at 17.96 ft; minimum discharge, 25 ft³/s Sept. 24, 2001.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	0000	*12,700	*11.87	No other peak greater than base discharge.			
Minimum discharge, 28 ft ³ /s Oct. 4-8.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	332	1730	2110	e700	624	755	376	242	91	44	32
2	30	191	1860	2500	e700	534	782	386	216	86	43	32
3	29	123	1160	1930	e750	465	844	396	198	83	42	32
4	29	94	908	1320	e700	422	855	368	184	80	42	32
5	28	81	928	1040	e750	412	884	347	183	79	43	32
6	28	75	3920	e2600	e800	571	773	323	178	76	44	32
7	28	68	3160	e3200	e1800	1160	696	298	163	75	44	34
8	28	61	1720	e4500	e2500	797	591	275	150	73	43	34
9	29	58	1340	e3000	e1800	628	627	263	143	72	42	33
10	31	55	1060	1690	e1600	567	927	249	135	70	40	33
11	105	52	901	1230	e1400	921	956	236	132	68	39	32
12	80	60	994	1120	e1200	2710	920	240	134	66	39	32
13	52	95	3420	998	e1100	1790	1160	276	137	66	38	31
14	43	402	6670	826	e1000	1310	4440	274	135	64	37	31
15	38	194	2450	665	e900	1070	2340	266	128	61	35	31
16	36	512	3420	555	e800	907	1590	254	124	60	35	31
17	35	709	5060	496	e800	771	1480	260	124	59	35	75
18	33	305	2680	432	e700	637	1300	276	234	58	34	128
19	33	197	2090	447	e1100	582	1110	268	176	57	35	72
20	32	228	1860	527	e1800	788	972	258	138	57	35	51
21	32	1060	1510	1820	e1900	1350	844	271	126	57	38	43
22	95	e3200	1160	1290	e1800	1690	739	271	119	55	38	40
23	501	e2100	919	913	e2000	1920	663	235	113	54	37	38
24	174	905	757	723	e1700	2140	578	222	107	51	36	37
25	92	906	659	2230	e1400	1740	533	221	103	50	35	36
26	68	823	595	3040	1000	1330	515	245	99	50	35	35
27	58	617	629	e1650	851	1110	494	e265	95	49	35	34
28	58	e2000	1280	e950	740	931	430	e275	92	48	34	34
29	61	e3400	1260	e800	---	830	392	e285	98	47	34	35
30	225	e1600	1410	e700	---	766	390	e300	99	47	33	62
31	527	---	2240	e600	---	758	---	269	---	46	33	---
TOTAL	2669	20503	59750	45902	34291	32231	29580	8748	4305	1955	1177	1234
MEAN	86.1	683	1927	1481	1225	1040	986	282	144	63.1	38.0	41.1
MAX	527	3400	6670	4500	2500	2710	4440	396	242	91	44	128
MIN	28	52	595	432	700	412	390	221	92	46	33	31
AC-FT	5290	40670	118500	91050	68020	63930	58670	17350	8540	3880	2330	2450
CFSM	0.38	3.01	8.49	6.52	5.40	4.58	4.34	1.24	0.63	0.28	0.17	0.18
IN.	0.44	3.36	9.79	7.52	5.62	5.28	4.85	1.43	0.71	0.32	0.19	0.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2002, BY WATER YEAR (WY)

MEAN	165	884	1519	1510	1402	1231	974	637	272	96.9	60.0	67.8
MAX	536	2887	5391	3415	3195	2774	2017	1337	780	193	158	260
(WY)	1957	1974	1965	1970	1986	1972	1993	1963	1984	1983	1976	1986
MIN	31.5	56.5	62.6	108	142	211	287	165	87.5	56.6	35.9	31.2
(WY)	1988	1994	1977	1977	1977	1992	1968	1992	1992	1973	1994	2001

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1957 - 2002
ANNUAL TOTAL	156787	242345	
ANNUAL MEAN	430	664	732
HIGHEST ANNUAL MEAN			1253
LOWEST ANNUAL MEAN			239
HIGHEST DAILY MEAN	6670	Dec 14	6670
LOWEST DAILY MEAN	26	Sep 23	28
ANNUAL SEVEN-DAY MINIMUM	27	Sep 18	28
ANNUAL RUNOFF (AC-FT)	311000		480700
ANNUAL RUNOFF (CFSM)		1.89	2.92
ANNUAL RUNOFF (INCHES)		25.69	39.71
10 PERCENT EXCEEDS		1030	1800
50 PERCENT EXCEEDS		207	271
90 PERCENT EXCEEDS		32	34

e Estimated

UMPQUA RIVER BASIN

14317450 NORTH UMPQUA RIVER NEAR IDLEYLD PARK, OR.

LOCATION.--Lat 43°19'29", long 122°59'55", IN SW 1/4 NE 1/4 sec.12, T.26 S., R.3 W., Douglas County, Hydrologic Unit 17100301, on right bank 0.5 mi upstream from Rock Creek bridge, 2 mi east of Idleyld Park, and at mile 36.3.

DRAINAGE AREA.--886 mi², at former site 0.5 mi downstream.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1998 to current year.
 pH: January 1998 to current year.
 WATER TEMPERATURE: January 1998 to current year.
 DISSOLVED OXYGEN: January 1998 to current year.
 TURBIDITY: October 1999 to current year.

INSTRUMENTATION.--Water-quality monitor and data logger since January 1998.

REMARKS.--

SPECIFIC CONDUCTANCE: Records good except for the period Apr. 5 to July 30, which are fair.
 Ph: Records good.
 WATER TEMPERATURE: Records excellent.
 DISSOLVED OXYGEN: Records fair.
 TURBIDITY: Records good. The probe was checked using a polymer bead standard.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 76 microsiemens June 22, 2001; minimum recorded, 26 microsiemens Nov. 21, 1998, but may have been lower during period of missing record.
 pH: Maximum, 8.7 units July 23, 2002; minimum recorded, 6.1 units Dec. 18, 1999, but may have been lower during period of missing record.
 WATER TEMPERATURE: Maximum recorded, 21.0°C Aug. 9, 2001; minimum recorded, 2.2°C Nov. 18, 19, 2000.
 DISSOLVED OXYGEN: Maximum recorded, 14.5 mg/L Feb. 10, 1999, but may have been higher during period of missing record; minimum recorded, 6.4 mg/L Aug. 14, 2001.
 TURBIDITY: Maximum recorded, 220 NTU Dec. 14, 2001; minimum recorded, <1 many days each year.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 73 microsiemens Aug. 18, 19, 26; minimum, 31 microsiemens Apr. 14.
 pH: Maximum recorded, 8.7 units July 23; minimum recorded, 6.7 units Nov. 22, but may have been lower during period of missing record.
 WATER TEMPERATURE: Maximum recorded, 20.8°C July 11; minimum recorded, 3.0°C Jan. 30.
 DISSOLVED OXYGEN: Maximum recorded, 13.3 mg/L Mar. 2, 18; minimum recorded, 8.8 mg/L several days in June and July, but may have been lower during period of missing record.
 TURBIDITY: Maximum recorded, 220 NTU Dec. 14; minimum, <1 many days during year.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	66	65	65	59	58	59	50	45	48	40	39	40
2	65	64	65	61	59	60	46	43	44	40	37	38
3	66	64	65	61	60	60	49	46	48	42	38	39
4	66	64	65	61	60	61	50	49	50	42	41	42
5	67	65	66	62	61	61	50	50	49	---	---	---
6	67	65	66	62	61	61	49	38	44	---	---	---
7	66	65	66	62	60	60	42	38	40	---	---	---
8	66	65	66	63	60	61	44	42	43	---	---	---
9	67	65	66	63	61	61	46	44	45	---	---	---
10	68	65	66	63	61	62	48	46	47	---	---	---
11	68	65	66	62	61	62	49	47	48	---	---	---
12	72	68	70	63	62	62	49	48	48	---	---	---
13	68	66	67	63	62	62	48	38	45	---	---	---
14	67	65	66	64	61	62	---	---	---	---	---	---
15	67	65	66	61	59	60	42	38	40	---	---	---
16	67	65	66	61	59	60	42	37	40	---	---	---
17	66	65	65	59	56	57	37	34	36	---	---	---
18	66	64	65	59	56	57	40	37	39	---	---	---
19	66	64	65	60	58	59	42	40	41	---	---	---
20	66	64	65	60	59	59	43	42	42	---	---	---
21	67	64	65	60	52	57	44	43	43	---	---	---
22	67	63	65	52	38	46	46	44	45	---	---	---
23	67	61	64	47	38	43	47	46	47	---	---	---
24	65	60	61	50	47	49	48	47	48	---	---	---
25	64	61	62	51	50	50	49	48	48	---	---	---
26	64	62	63	53	51	52	50	48	49	40	36	38
27	64	63	63	54	53	54	50	49	50	42	40	41
28	65	62	63	54	40	52	49	43	46	45	42	44
29	65	63	64	44	39	41	44	43	44	46	45	46
30	65	63	64	49	44	47	44	42	43	47	46	47
31	65	59	63	---	---	---	43	38	40	49	47	48
MONTH	72	59	65	64	38	57	---	---	---	---	---	---

UMPQUA RIVER BASIN

14317450 NORTH UMPQUA RIVER NEAR IDLEYLD PARK, OR--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	48	48	48	46	45	46	---	---	---	47	47	47
2	49	48	48	47	46	47	---	---	---	48	47	47
3	51	49	49	48	47	47	---	---	---	48	45	46
4	50	48	49	49	47	48	---	---	---	46	45	45
5	49	48	48	49	48	49	41	38	39	46	45	45
6	50	48	49	49	47	48	40	38	39	46	45	46
7	48	39	45	48	44	45	41	39	40	43	42	43
8	41	38	39	48	44	46	42	40	41	47	46	46
9	43	41	42	48	45	47	42	41	42	48	46	48
10	---	---	---	48	47	47	42	38	39	48	47	48
11	---	---	---	48	45	47	39	38	38	49	48	49
12	---	---	---	45	37	40	39	37	38	50	48	49
13	---	---	---	42	39	40	39	38	38	49	48	49
14	---	---	---	45	42	43	38	31	33	48	47	47
15	---	---	---	45	44	44	35	32	34	48	47	47
16	---	---	---	47	44	44	37	35	36	49	48	48
17	---	---	---	45	44	45	39	37	38	49	48	48
18	---	---	---	46	45	46	41	39	40	52	47	49
19	---	---	---	48	46	47	43	41	42	48	47	47
20	41	39	40	48	46	48	44	42	43	48	47	47
21	42	40	41	46	44	45	45	44	44	44	42	44
22	40	39	40	45	42	43	46	44	45	48	46	47
23	40	38	39	43	40	41	46	45	46	48	48	48
24	41	39	40	42	40	41	---	---	---	49	48	49
25	42	40	41	44	42	42	46	45	46	49	49	49
26	44	42	43	44	43	43	46	45	46	49	48	49
27	45	44	44	45	44	44	46	45	45	48	47	48
28	46	45	45	45	44	45	46	45	46	47	45	46
29	---	---	---	46	45	45	47	46	46	46	44	45
30	---	---	---	46	45	45	47	47	47	45	43	44
31	---	---	---	---	---	---	---	---	---	44	43	44
MONTH	---	---	---	---	---	---	---	---	---	52	42	47
	JUNE			JULY			AUGUST			SEPTEMBER		
1	45	43	44	62	60	61	66	64	65	67	66	66
2	46	44	45	64	61	62	66	65	65	67	66	66
3	46	45	46	---	---	---	67	65	66	67	65	66
4	47	46	47	56	56	56	67	65	66	67	66	67
5	48	47	48	64	63	63	67	64	65	67	66	66
6	43	42	43	64	63	64	66	65	65	68	66	66
7	50	48	49	64	63	63	66	65	66	66	65	66
8	50	49	49	63	63	63	67	65	66	67	65	66
9	51	50	51	63	62	62	67	65	66	71	65	67
10	52	51	51	63	62	63	67	65	66	70	65	67
11	53	51	52	63	63	63	67	65	66	66	65	65
12	53	52	53	65	63	63	67	66	66	66	65	65
13	53	53	53	64	63	64	67	62	66	67	65	65
14	53	53	53	65	63	64	67	67	67	68	65	66
15	53	52	53	65	64	65	70	67	67	65	65	65
16	53	52	53	65	64	65	70	66	67	66	65	65
17	56	53	54	56	56	56	70	66	67	65	63	64
18	55	53	54	66	65	66	73	67	67	72	64	69
19	54	51	52	67	66	66	73	67	69	72	66	69
20	53	52	53	67	67	67	70	68	69	67	66	66
21	54	53	54	68	67	67	69	68	68	68	66	66
22	56	54	55	68	67	68	72	68	69	67	66	66
23	57	56	56	68	68	68	69	68	68	67	66	66
24	58	56	57	69	68	68	71	68	70	67	65	66
25	58	57	57	69	68	68	71	68	69	66	65	65
26	59	57	58	69	68	69	73	69	70	68	65	66
27	60	57	59	70	68	69	---	---	---	67	66	66
28	61	59	60	71	68	69	67	65	66	68	66	66
29	61	60	60	70	68	69	66	65	66	68	65	66
30	62	60	61	65	59	61	70	65	66	67	66	67
31	---	---	---	65	64	64	67	65	66	---	---	---
MONTH	62	42	53	---	---	---	---	---	---	72	63	66

14317450 NORTH UMPQUA RIVER NEAR IDLEYLD PARK, OR--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	12.5	11.0	11.7	9.9	9.6	9.8	6.9	6.4	6.5	7.0	6.5	6.7
2	12.6	11.2	11.8	9.7	9.1	9.5	6.9	6.7	6.8	7.3	7.0	7.2
3	12.6	11.2	11.8	9.1	8.1	8.6	6.8	6.1	6.4	7.1	6.9	6.4
4	12.5	11.3	11.8	8.3	7.6	8.0	6.1	5.1	5.4	5.9	5.3	5.4
5	11.8	11.1	11.4	8.3	7.6	7.9	5.1	4.3	4.6	---	---	---
6	11.8	11.1	11.4	8.2	7.1	7.9	6.9	4.8	5.8	---	---	---
7	11.5	10.4	10.9	7.1	5.7	6.5	6.9	6.5	6.7	---	---	---
8	10.8	10.0	10.4	5.9	5.2	5.6	6.5	5.9	6.1	---	---	---
9	10.7	9.6	10.1	5.9	5.2	5.5	6.2	5.7	6.0	---	---	---
10	9.8	9.2	9.4	6.6	5.5	6.1	5.7	4.8	5.1	---	---	---
11	10.2	9.1	9.6	7.2	6.2	6.8	5.3	4.7	4.9	---	---	---
12	9.9	9.1	9.6	8.0	7.1	7.7	5.5	5.1	5.3	---	---	---
13	10.7	9.3	10	8.2	7.9	8.1	6.7	5.5	5.8	---	---	---
14	10.2	9.5	9.8	8.8	8.2	8.5	---	---	---	---	---	---
15	10.3	9.1	9.7	8.7	8.5	8.6	6.2	5.8	5.9	---	---	---
16	10.4	9.6	9.9	8.7	8.5	8.6	7.1	5.9	6.3	---	---	---
17	10.1	9.1	9.7	8.7	7.9	8.4	7.2	6.8	7.1	---	---	---
18	9.1	8.3	8.7	7.9	6.7	7.1	6.8	6.3	6.5	---	---	---
19	8.7	7.8	8.2	7.5	6.7	7.1	6.4	6.1	6.2	---	---	---
20	9.1	7.8	8.4	7.6	7.4	7.5	6.2	6.0	6.1	---	---	---
21	9.6	8.6	9.1	7.9	7.5	7.8	6.0	5.1	5.5	---	---	---
22	9.4	9.0	9.2	8.5	7.9	8.2	5.4	4.8	5.1	---	---	---
23	9.5	9.1	9.3	8.3	7.7	8.0	5.4	4.7	5.0	---	---	---
24	9.2	8.0	8.7	7.7	6.6	7.2	4.7	3.9	4.2	---	---	---
25	8.2	7.6	7.9	6.6	6.2	6.3	4.3	3.8	4.0	---	---	---
26	8.0	7.4	7.7	6.2	5.7	5.9	4.7	4.3	4.5	5.8	5.2	5.6
27	8.2	7.4	7.8	5.7	5.2	5.3	5.1	4.7	4.9	5.2	4.6	4.7
28	8.8	7.8	8.3	6.4	5.1	5.3	5.7	5.1	5.5	4.6	3.9	4.2
29	8.9	8.4	8.7	7.0	6.4	6.9	6.1	5.5	5.7	3.9	3.1	3.4
30	9.3	8.7	9.0	6.8	6.5	6.6	6.3	6.0	6.1	3.3	3.0	3.1
31	9.9	9.2	9.6	---	---	---	6.8	6.3	6.6	3.9	3.2	3.4
MONTH	12.6	7.4	9.7	9.9	5.1	7.4	---	---	---	---	---	---

UMPQUA RIVER BASIN

14317450 NORTH UMPQUA RIVER NEAR IDLEYLD PARK, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	4.3	3.9	4.1	4.2	3.4	3.8	---	---	---	9.7	7.9	8.6
2	4.3	3.9	4.2	3.8	3.0	3.4	---	---	---	11.4	8.9	10.0
3	4.5	4.2	4.4	4.1	3.2	3.6	---	---	---	11.2	9.5	10.5
4	4.4	3.9	4.1	4.6	3.8	4.2	---	---	---	10.8	8.7	9.8
5	4.1	3.7	3.9	4.9	4.4	4.6	8.3	7.4	7.8	10.2	8.5	9.3
6	4.7	4.1	4.3	5.6	4.9	5.3	8.0	7.1	7.5	10.0	8.5	9.3
7	5.5	4.7	5.0	5.5	4.1	4.9	8.1	7.0	7.7	9.7	7.9	9.0
8	5.8	5.2	5.5	4.1	3.6	3.9	8.2	6.9	7.7	9.8	7.4	8.7
9	5.6	4.9	5.2	4.2	3.4	3.8	8.4	7.6	8.0	9.7	7.9	8.6
10	---	---	---	4.9	4.1	4.4	7.9	7.1	7.6	10.2	8.2	9.0
11	---	---	---	6.2	4.9	5.5	7.9	7.3	7.7	10.8	8.3	9.6
12	---	---	---	6.2	5.3	5.9	8.7	7.4	8.1	12.1	9.3	10.6
13	---	---	---	5.3	4.7	4.8	8.4	8.1	8.2	12.1	10.1	10.8
14	---	---	---	5.1	4.3	4.8	8.2	6.4	7.4	11.4	9.1	10.3
15	---	---	---	4.9	4.4	4.7	6.4	5.6	5.9	11.4	9.1	10.4
16	---	---	---	4.6	3.6	4.1	5.8	5.4	5.6	11.6	9.0	10.5
17	---	---	---	3.9	3.1	3.5	5.8	5.2	5.5	12.7	9.9	11.3
18	---	---	---	4.2	3.4	3.8	6.3	5.2	5.7	12.6	10.7	11.5
19	---	---	---	5.1	4.0	4.6	7.3	5.7	6.5	11.5	10.1	10.7
20	6.3	5.5	5.8	5.8	4.6	5.2	8.1	6.4	7.2	10.5	9.3	10.0
21	6.6	6.0	6.3	6.3	5.2	5.8	8.6	6.5	7.6	10.3	9.0	9.6
22	6.6	6.1	6.3	6.5	5.6	6.1	9.2	7.1	8.2	10.4	8.8	9.6
23	6.7	6.2	6.5	6.5	6.0	6.3	9.4	7.5	8.5	11.3	8.5	9.9
24	6.5	5.6	6.0	6.8	5.8	6.3	---	---	---	12.0	9.6	10.8
25	5.6	4.8	5.0	6.9	5.8	6.4	10.4	7.9	9.1	12.9	10.8	11.8
26	5.2	4.5	4.9	7.0	5.8	6.5	10.0	8.3	8.9	13.9	11.7	12.8
27	5.1	4.5	4.8	7.5	6.3	6.9	8.9	7.7	8.3	13.8	12.1	12.5
28	4.8	4.2	4.6	7.5	6.2	6.9	8.8	6.9	7.9	12.2	11.2	11.6
29	---	---	---	7.8	6.5	7.2	9.2	7.3	8.4	13.6	10.8	12.1
30	---	---	---	7.6	6.3	7.0	9.0	8.0	8.4	14.6	12.1	13.3
31	---	---	---	---	---	---	---	---	---	14.0	12.0	13.2
MONTH	---	---	---	---	---	---	---	---	---	14.6	7.4	10.5
	JUNE			JULY			AUGUST			SEPTEMBER		
1	14.2	11.9	13.1	18.2	16.2	17.1	19.5	17.0	18.0	17.2	14.9	16.0
2	13.8	11.5	12.9	18.5	16.7	17.4	19.0	16.9	17.7	17.4	15.2	16.2
3	13.4	11.3	12.4	18.0	16.5	17.2	17.7	15.9	16.7	16.6	15.1	15.7
4	14.6	11.8	13.1	17.5	16.2	16.7	16.3	14.9	15.6	15.2	13.3	14.4
5	15.4	13.1	14.3	17.5	15.7	16.5	15.1	14.1	14.5	14.8	13.2	14.0
6	15.3	13.5	14.5	17.9	16.1	16.8	16.1	13.6	14.6	14.3	12.8	13.5
7	14.6	12.4	13.4	17.2	16.3	16.8	16.3	13.6	14.8	14.1	12.7	13.2
8	13.5	10.9	11.7	18.6	16.0	17.1	17.1	14.3	15.5	13.2	12.1	12.6
9	12.3	10.3	11.2	19.3	17.0	17.9	17.8	14.8	16.1	13.7	11.3	12.4
10	13.5	10.9	12.1	20.4	17.8	18.9	18.8	15.7	17.1	14.2	12.2	13.0
11	14.8	12.6	13.6	20.8	18.8	19.5	19.2	16.4	17.6	14.9	12.8	13.8
12	15.9	13.9	15.0	20.6	19.1	19.6	19.3	16.5	17.7	15.4	13.3	14.3
13	16.4	14.8	15.8	20.7	19.1	19.8	18.9	17.0	17.7	15.7	13.8	14.7
14	16.4	15.1	16.0	20.0	18.5	19.2	20.1	16.9	18.3	15.5	14.2	14.8
15	16.3	15.0	15.9	19.9	18.1	18.8	19.9	17.5	18.5	15.4	13.8	14.5
16	16.3	14.9	15.7	19.8	17.8	18.6	19.3	17.0	18.0	14.8	13.9	14.4
17	15.9	13.6	14.6	19.8	17.8	18.5	18.5	16.4	17.3	14.3	13.5	13.9
18	13.7	12.6	13.2	19.6	17.8	18.5	17.2	15.7	16.3	14.9	13.1	13.9
19	14.5	12.1	13.3	18.6	17.6	18.0	16.5	14.4	15.4	14.8	13.7	14.1
20	15.3	12.9	14.1	19.8	17.3	18.3	16.1	14.9	15.5	14.7	13.2	13.8
21	16.0	14.0	14.9	20.1	17.7	18.7	16.6	14.2	15.3	14.3	12.9	13.5
22	16.3	14.8	15.5	19.6	18.1	18.7	16.6	14.9	15.6	14.2	12.6	13.3
23	16.9	15.3	16.0	19.9	17.5	18.5	17.0	14.5	15.6	14.0	12.7	13.2
24	17.6	16.2	16.8	19.9	17.8	18.7	17.3	15.1	16.0	13.9	12.4	13.0
25	17.8	16.2	17.0	19.7	17.8	18.6	16.7	15.5	16.0	13.9	12.4	13.0
26	17.9	16.8	17.3	19.8	17.5	18.4	17.5	15.2	16.2	13.5	12.2	12.7
27	17.8	16.7	17.2	19.8	17.7	18.5	17.3	15.4	16.1	13.2	11.9	12.4
28	17.4	16.2	16.9	19.8	17.3	18.3	17.9	15.5	16.6	12.7	11.5	12.0
29	17.1	16.0	16.5	20.5	17.7	18.8	18.1	16.1	17.0	12.1	11.2	11.6
30	17.4	16.3	16.8	20.6	18.2	19.0	17.5	15.8	16.6	11.6	10.7	11.2
31	---	---	---	19.8	18.1	18.7	17.0	15.0	16.0	---	---	---
MONTH	17.9	10.3	14.7	20.8	15.7	18.3	20.1	13.6	16.4	17.4	10.7	13.6

UMPQUA RIVER BASIN

14317450 NORTH UMPQUA RIVER NEAR IDLEYLD PARK, OR--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	11.3	10	10.4	10.6	10.2	10.4	12.2	12.0	12.1	11.6	11.3	11.5
2	11.3	9.8	10.3	10.7	10.2	10.4	12.1	12.0	12.0	11.4	11.3	11.4
3	11.4	9.8	10.3	11.1	10.3	10.6	12.5	12.0	12.3	11.8	11.3	11.6
4	11.3	9.7	10.1	11.4	10.6	10.8	12.8	12.4	12.6	11.6	11.4	11.6
5	11.4	9.6	10.3	11.2	10.5	10.8	13.1	12.6	12.8	---	---	---
6	11.0	9.7	10.1	11.4	10.4	10.7	12.8	12.6	12.8	---	---	---
7	11.2	9.8	10.3	12.0	10.8	11.2	12.8	12.5	12.6	---	---	---
8	11.1	9.9	10.4	12.3	11.2	11.8	12.7	12.4	12.5	---	---	---
9	11.6	10.0	10.6	12.3	12.0	12.2	12.7	12.4	12.6	---	---	---
10	11.0	10.2	10.5	12.0	11.7	11.9	12.9	12.5	12.7	---	---	---
11	11.0	10.3	10.6	11.7	11.2	11.5	12.9	12.6	12.8	---	---	---
12	11.2	10.4	10.7	11.3	10.9	11.1	12.8	12.6	12.7	---	---	---
13	11.1	10.2	10.5	11.1	10.8	10.9	12.6	12.2	12.5	---	---	---
14	11.2	10.2	10.5	11.0	10.6	10.8	---	---	---	---	---	---
15	11.3	10.1	10.6	10.7	10.5	10.6	12.3	12.1	12.2	---	---	---
16	11.3	10.1	10.5	10.7	10.4	10.6	12.2	11.8	12.0	---	---	---
17	11.3	10.2	10.6	10.8	10.5	10.7	12.1	11.8	12.0	---	---	---
18	11.8	10.3	10.8	11.6	10.7	11.4	12.0	11.9	11.9	---	---	---
19	11.8	10.5	10.9	11.8	11.3	11.5	12.0	11.8	11.9	---	---	---
20	11.8	10.2	10.8	11.8	11.6	11.7	12.0	11.8	11.9	---	---	---
21	11.3	10.1	10.5	11.7	11.4	11.5	12.3	11.9	12.2	---	---	---
22	10.6	10.1	10.3	11.9	11.4	11.6	12.4	12.2	12.3	---	---	---
23	10.8	10.2	10.5	12.0	11.8	11.9	12.5	12.2	12.4	---	---	---
24	11.4	10.5	10.9	12.0	11.7	11.8	12.7	12.5	12.6	---	---	---
25	11.8	10.8	11.1	12.4	11.9	12.2	12.8	12.5	12.7	---	---	---
26	11.4	10.8	11.0	12.8	12.3	12.6	12.5	12.3	12.4	11.4	11.1	11.3
27	11.3	10.8	11.0	13.0	12.6	12.7	12.3	12.0	12.1	11.9	11.3	11.7
28	11.2	10.6	10.9	12.6	12.3	12.5	12.1	11.8	11.9	12.2	11.6	12.0
29	11.0	10.5	10.7	12.3	12.1	12.2	12.1	11.8	11.9	12.9	12.1	12.6
30	10.6	10.3	10.4	12.4	12.1	12.2	11.9	11.7	11.8	13.0	12.5	12.8
31	10.6	10.3	10.4	---	---	---	11.7	11.5	11.6	12.8	12.2	12.6
MONTH	11.8	9.6	10.6	13.0	10.2	11.4	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	12.3	11.7	12.1	13.1	12.7	12.9	---	---	---	12.5	11.8	12.2
2	12.1	11.6	11.9	13.3	12.8	13.1	---	---	---	12.2	11.2	11.8
3	12.0	11.6	11.8	13.2	12.8	13.0	---	---	---	12.1	11.3	11.7
4	12.2	11.7	11.9	13.0	12.5	12.8	---	---	---	12.3	11.4	11.9
5	12.3	11.8	12.1	12.7	12.3	12.6	11.2	10.9	11.1	12.3	11.6	12.0
6	11.9	11.6	11.8	12.3	12.1	12.2	11.5	11.2	11.3	12.4	11.7	12.0
7	11.9	11.7	11.8	12.8	12.1	12.5	11.5	11.1	11.3	12.5	11.5	11.9
8	12.1	11.9	12.0	13.2	12.8	13.0	11.5	11.0	11.3	12.3	11.4	11.8
9	---	---	---	13.1	12.7	12.9	11.3	11.1	11.2	12.2	11.4	11.9
10	---	---	---	12.9	12.5	12.8	11.6	11.2	11.4	12.2	11.5	11.9
11	---	---	---	12.6	12.1	12.4	11.5	11.3	11.4	12.2	11.2	11.7
12	---	---	---	12.5	12.1	12.3	11.6	11.2	11.4	11.9	10.9	11.4
13	---	---	---	12.8	12.5	12.7	11.4	11.2	11.3	11.7	10.9	11.4
14	---	---	---	13.0	12.6	12.8	11.9	11.2	11.6	12.0	11.1	11.6
15	---	---	---	12.8	12.6	12.7	12.1	11.9	12.0	11.9	11.1	11.5
16	---	---	---	13.0	12.6	12.9	12.1	12.0	12.0	11.9	11.0	11.5
17	---	---	---	13.2	13.0	13.1	12.2	12.0	12.1	11.7	10.7	11.2
18	---	---	---	13.3	12.9	13.1	12.3	12.0	12.2	11.4	10.7	11.1
19	---	---	---	13.0	12.4	12.7	12.2	11.7	12.0	11.5	10.9	11.2
20	12.4	12.1	12.2	12.7	12.1	12.4	12.0	11.4	11.7	11.7	11.2	11.4
21	12.2	11.9	12.1	12.3	11.8	12.1	11.9	11.3	11.6	11.9	11.3	11.6
22	12.1	11.8	12.0	12.1	11.7	11.9	11.8	11.2	11.5	11.9	11.3	11.6
23	12.0	11.8	11.9	11.9	11.7	11.8	11.8	11.2	11.5	11.9	11.0	11.5
24	12.3	12.0	12.2	12.0	11.6	11.8	---	---	---	11.7	10.8	11.3
25	12.7	12.3	12.6	12.0	11.5	11.8	12.5	11.6	12.1	11.2	10.4	10.9
26	12.8	12.4	12.6	11.9	11.4	11.7	12.4	11.7	12.1	10.9	10.2	10.6
27	12.7	12.4	12.6	11.8	11.3	11.5	12.5	11.9	12.2	10.8	10.2	10.6
28	12.8	12.5	12.6	11.8	11.2	11.5	12.8	12.1	12.4	11.0	10.6	10.8
29	---	---	---	11.6	11.0	11.3	12.6	11.9	12.2	11.1	10.3	10.8
30	---	---	---	11.6	11.0	11.3	12.4	11.9	12.2	10.8	10.2	10.5
31	---	---	---	---	---	---	---	---	---	10.9	10.2	10.5
MONTH	---	---	---	---	---	---	---	---	---	12.5	10.2	11.4

UMPQUA RIVER BASIN

14317450 NORTH UMPQUA RIVER NEAR IDLEYLD PARK, OR--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	10.8	10.2	10.5	---	---	---	9.8	9.1	9.4	10.3	9.4	9.8
2	10.9	10.2	10.5	---	---	---	9.9	9.1	9.4	10.2	9.3	9.7
3	11.1	10.3	10.6	---	---	---	10.2	9.3	9.7	10.3	9.3	9.8
4	10.9	10.0	10.5	---	---	---	10.4	9.6	10	10.7	9.7	10.2
5	10.6	9.9	10.2	---	---	---	10.7	9.9	10.2	10.7	9.9	10.3
6	10.6	9.9	10.2	10.2	9.4	9.7	10.8	9.9	10.3	10.9	10.1	10.4
7	10.9	10.0	10.5	10.1	9.3	9.7	10.7	9.9	10.2	11.0	10.2	10.5
8	11.3	10.3	10.9	10.3	9.3	9.8	10.6	9.8	10.1	11.2	10.4	10.7
9	11.4	10.6	11.1	10.1	9.2	9.6	10.5	9.5	10	11.3	10.5	10.9
10	11.3	10.3	10.8	9.8	9.0	9.3	10.2	9.3	9.7	11.2	10.2	10.7
11	10.9	10.0	10.5	9.8	8.9	9.2	10.1	9.2	9.6	10.9	10.0	10.5
12	10.6	9.8	10.2	9.7	8.8	9.2	10.1	9.2	9.6	10.9	9.9	10.3
13	10.4	9.7	10.0	9.6	8.8	9.1	10.0	9.2	9.6	10.8	9.9	10.2
14	10.4	9.7	10.0	9.8	8.8	9.3	10.5	9.3	9.7	10.7	9.9	10.2
15	10.4	9.7	10.0	9.9	9.0	9.4	---	---	---	10.8	10	10.3
16	10.4	9.7	10.0	10	9.1	9.4	---	---	---	10.9	10.0	10.4
17	10.4	9.7	10.1	10	9.1	9.4	---	---	---	10.8	10.1	10.4
18	11.2	10.0	10.4	9.9	9.1	9.4	---	---	---	10.9	10.2	10.5
19	10.6	9.7	10.2	10.0	9.1	9.4	---	---	---	10.8	10.2	10.5
20	10.3	9.4	9.9	9.9	9.1	9.4	---	---	---	10.9	10.3	10.5
21	10.1	9.2	9.7	9.8	9.0	9.3	---	---	---	11.1	10.3	10.6
22	9.8	9.1	9.4	9.8	8.9	9.3	---	---	---	11.2	10.4	10.7
23	9.6	8.9	9.3	9.8	9.0	9.4	---	---	---	11.1	10.5	10.7
24	9.4	8.8	9.0	9.9	9.0	9.4	---	---	---	11.1	10.3	10.6
25	---	---	---	9.8	9.0	9.4	---	---	---	11.0	10.3	10.6
26	---	---	---	9.9	9.1	9.4	---	---	---	11.1	10.3	10.6
27	---	---	---	9.9	9.1	9.4	---	---	---	11.0	10.4	10.7
28	---	---	---	9.9	9.1	9.4	10.0	9.1	9.5	11.1	10.5	10.8
29	---	---	---	9.8	8.9	9.3	9.9	9.1	9.4	11.2	10.6	10.9
30	---	---	---	9.7	8.8	9.2	10.1	9.2	9.5	11.4	10.8	11.1
31	---	---	---	9.7	8.8	9.2	10.2	9.3	9.7	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	11.4	9.3	10.5

TURBIDITY (NTU), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	2	<1	1	2	<1	1	9	5	6	6	4	5
2	2	<1	<1	1	<1	<1	9	6	8	8	5	5
3	<1	<1	<1	2	<1	<1	7	4	5	7	4	5
4	<1	<1	<1	<1	<1	<1	4	3	4	4	2	3
5	1	<1	<1	1	<1	<1	11	4	8	3	2	2
6	2	<1	<1	<1	<1	<1	52	8	28	22	2	6
7	<1	<1	<1	1	<1	<1	31	9	14	23	7	8
8	<1	<1	<1	<1	<1	<1	9	6	7	45	7	29
9	<1	<1	<1	1	<1	<1	6	4	5	22	9	13
10	<1	<1	<1	3	<1	<1	5	3	4	9	4	6
11	1	<1	<1	2	<1	<1	7	3	4	5	3	4
12	2	<1	<1	2	<1	<1	6	4	4	4	3	3
13	<1	<1	<1	2	<1	<1	127	4	6	3	2	2
14	<1	<1	<1	5	1	3	220	24	61	2	2	2
15	2	<1	<1	2	1	2	30	12	15	3	1	2
16	2	<1	<1	6	1	2	17	10	13	2	1	1
17	1	<1	<1	9	3	5	38	16	24	2	<1	1
18	2	<1	<1	3	<1	2	17	8	11	1	<1	<1
19	1	<1	<1	6	<1	<1	9	5	7	1	<1	1
20	<1	<1	<1	1	<1	<1	7	4	5	4	1	2
21	<1	<1	<1	12	<1	8	4	4	4	11	3	9
22	3	<1	1	55	8	25	5	3	4	9	5	6
23	14	3	10	40	8	14	3	2	3	5	3	4
24	6	2	3	8	4	5	3	2	2	4	2	3
25	2	<1	1	7	4	6	3	2	2	27	3	4
26	<1	<1	<1	7	5	6	2	1	2	28	11	16
27	1	<1	<1	5	3	4	2	1	2	11	6	8
28	1	<1	<1	35	3	4	4	2	3	6	4	5
29	<1	<1	<1	35	10	17	3	2	2	4	3	3
30	3	<1	<1	11	6	8	3	2	3	3	2	3
31	8	2	4	---	---	---	8	3	6	2	2	2
MAX	14	3	10	55	10	25	220	24	61	45	11	29
MIN	<1	<1	<1	<1	<1	<1	2	1	2	1	<1	<1

UMPQUA RIVER BASIN

14318000 LITTLE RIVER AT PEEL, OR

LOCATION.--Lat 43°15'10", long 123°01'30", in NW 1/4 sec.2, T.27 S., R.3 W., Douglas County, Hydrologic Unit 17100301, on left bank 0.6 mi southeast of Peel, 0.9 mi downstream from Cavitt Creek, and at mile 6.3.

DRAINAGE AREA.--177 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1954 to September 1989, July 1999 to current year.

GAGE.--Water-stage recorder. Datum of gage is 828.33 ft above NGVD of 1929.

REMARKS.--Records good. No regulation. Small diversions for rural domestic use and irrigation upstream from station.

AVERAGE DISCHARGE.--37 years (1955-89, 2001-02), 459 ft³/s, 35.20 in/yr, 332,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,100 ft³/s Dec. 11, 1956, gage height, 19.63 ft, from rating curve extended above 5,900 ft³/s on basis of slope-area measurement at gage height 16.55 ft; minimum discharge, 11 ft³/s Sept. 2, 23, 24, 2001.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Nov. 22, 23, 1953, reached a stage of 20.6 ft, from floodmark, discharge, 22,700 ft³/s, from rating curve extended above 5,900 ft³/s on basis of slope-area measurement at gage height 16.55 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	0100	*6,640	*10.71	No other peak greater than base discharge.			
Minimum discharge, 11 ft ³ /s Sept. 2, 3, 12-16, 27, 28.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	78	1230	1180	460	441	465	331	116	44	19	12
2	18	56	1080	1350	e500	388	476	322	108	42	19	12
3	17	45	798	1090	e500	346	503	315	101	40	19	12
4	16	39	674	792	e450	314	518	294	93	39	19	13
5	16	37	1290	633	537	302	533	275	87	38	19	13
6	16	38	2130	1360	541	344	495	259	83	37	20	13
7	16	33	1620	1490	1400	475	455	241	80	36	20	16
8	17	31	1030	2740	2090	400	415	223	78	35	19	16
9	19	29	903	1660	1280	355	421	212	80	34	18	15
10	20	28	731	1080	936	334	539	200	75	34	18	13
11	43	27	780	803	804	370	518	188	71	32	17	13
12	43	34	960	710	687	778	493	185	66	32	17	12
13	29	51	1940	623	622	808	611	192	62	31	16	11
14	25	61	4290	535	575	753	2360	186	59	30	15	11
15	23	56	1920	455	525	700	1420	180	58	30	14	11
16	22	301	2460	394	513	629	1050	172	57	29	13	11
17	21	371	3840	364	504	564	1040	171	59	28	13	31
18	20	172	2040	327	464	497	1050	172	106	29	13	80
19	20	113	1370	362	832	473	928	167	88	28	14	34
20	20	153	1140	429	1370	623	806	170	70	28	15	23
21	20	504	892	784	1360	876	699	186	65	27	15	19
22	30	1330	727	723	1190	989	625	199	61	26	16	17
23	251	913	613	615	1350	1060	564	166	58	25	16	15
24	113	509	518	568	1140	1660	490	149	54	24	15	13
25	59	787	456	1480	873	1250	446	141	52	23	14	13
26	43	692	419	2270	697	928	417	137	49	23	15	12
27	36	456	446	1210	587	761	433	138	46	23	14	12
28	38	1110	743	822	508	642	402	152	46	22	14	12
29	37	1520	724	621	---	562	363	143	46	22	13	13
30	67	862	759	505	---	511	350	134	47	20	12	19
31	143	---	1300	435	---	482	---	125	---	20	12	---
TOTAL	1277	10436	39823	28410	23295	19615	19885	6125	2121	931	493	517
MEAN	41.2	348	1285	916	832	633	663	198	70.7	30.0	15.9	17.2
MAX	251	1520	4290	2740	2090	1660	2360	331	116	44	20	80
MIN	16	27	419	327	450	302	350	125	46	20	12	11
AC-FT	2530	20700	78990	56350	46210	38910	39440	12150	4210	1850	978	1030
CFSM	0.23	1.97	7.26	5.18	4.70	3.57	3.74	1.12	0.40	0.17	0.09	0.10
IN.	0.27	2.19	8.37	5.97	4.90	4.12	4.18	1.29	0.45	0.20	0.10	0.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2002, BY WATER YEAR (WY)

MEAN	101	564	959	946	812	795	627	421	166	57.2	32.2	37.0
MAX	366	2162	3090	2122	1857	1757	1065	956	501	137	88.6	181
(WY)	1963	1974	1965	1971	1986	1972	1979	1963	1984	1983	1976	1986
MIN	14.4	41.3	34.9	53.4	70.2	249	237	108	54.0	30.0	15.9	15.8
(WY)	1988	1977	1977	1977	1977	1978	1968	1987	1987	2002	2002	2001

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1955 - 2002

ANNUAL TOTAL	102770	152928										
ANNUAL MEAN	282	419							459			
HIGHEST ANNUAL MEAN									805		1974	
LOWEST ANNUAL MEAN									158		1977	
HIGHEST DAILY MEAN			4290	Dec 14	4290	Dec 14	15200	Dec 22	1964			
LOWEST DAILY MEAN			11	Sep 23	11	Sep 13	11	Sep 23	2001			
ANNUAL SEVEN-DAY MINIMUM			12	Sep 18	12	Sep 10	12	Sep 18	2001			
ANNUAL RUNOFF (AC-FT)	203800	303300							332200			
ANNUAL RUNOFF (CFSM)		1.59					2.37		2.59			
ANNUAL RUNOFF (INCHES)		21.60					32.14		35.20			
10 PERCENT EXCEEDS		722					1120		1100			
50 PERCENT EXCEEDS		126					172		216			
90 PERCENT EXCEEDS		18					15		25			

e Estimated

14318000 LITTLE RIVER AT PEEL, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

WATER TEMPERATURE: June 1999 to current year.

INSTRUMENTATION.--Temperature recorder since June 1999.

REMARKS.--Record excellent.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum 24.3°C July 11, 2002; minimum, 0.5°C Nov. 19, 2000.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum 24.3°C July 11; minimum, 2.5°C Mar. 2.

WATER TEMPERATURE, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	14.4	12.1	13.3	11.1	10.2	10.6	7.3	6.9	7.1	7.7	6.8	7.3
2	14.7	12.7	13.8	11.3	10.5	10.9	7.4	6.6	7.0	7.8	6.9	7.6
3	14.2	12.4	13.4	10.5	9.4	9.8	7.0	6.0	6.5	6.9	6.1	6.4
4	14.1	12.1	13.2	9.4	8.4	8.8	6.0	5.5	5.7	6.2	5.2	5.7
5	13.5	12.1	12.9	9.2	8.3	8.7	6.3	5.3	5.8	7.2	5.9	6.4
6	13.1	12.3	12.7	9.0	7.8	8.6	7.0	6.3	6.7	7.9	7.2	7.6
7	12.5	11.1	11.7	7.8	5.8	6.4	6.7	6.1	6.4	8.0	7.7	7.9
8	11.6	10.7	11.1	5.8	4.4	5.0	6.7	5.6	6.1	7.8	7.4	7.7
9	11.8	10.4	11.1	5.2	4.2	4.8	6.5	5.5	6.1	7.4	6.3	6.7
10	11.0	9.6	10.0	6.1	4.8	5.5	5.5	4.9	5.1	6.8	5.7	6.3
11	11.4	10.0	10.6	8.0	6.1	7.1	6.2	5.1	5.6	7.3	6.2	6.7
12	10.6	9.2	10.0	9.0	8.0	8.5	6.4	5.3	5.9	7.4	7.0	7.2
13	11.9	10.3	11.0	9.0	8.6	8.8	7.3	6.4	6.8	7.0	5.7	6.3
14	11.8	10.5	11.1	10.1	8.9	9.5	7.0	6.0	6.4	5.7	4.9	5.2
15	11.7	10.4	11.1	10.2	9.4	9.9	6.4	5.9	6.2	4.9	4.3	4.6
16	12.0	10.9	11.5	10.1	9.1	9.7	7.4	6.4	7.0	4.3	3.8	4.0
17	12.0	10.8	11.3	9.1	7.1	8.3	7.4	6.5	7.0	4.3	3.4	3.8
18	10.8	8.9	9.6	7.1	5.9	6.5	6.9	6.4	6.6	4.9	3.8	4.3
19	9.3	7.8	8.6	8.9	6.7	7.9	6.9	6.2	6.6	4.8	4.3	4.5
20	9.0	8.0	8.6	8.9	8.5	8.6	6.8	6.2	6.5	4.9	4.1	4.4
21	10.4	8.9	9.5	8.5	8.0	8.2	6.2	5.1	5.4	5.0	4.0	4.3
22	10.6	10.1	10.3	8.6	8.0	8.4	6.5	5.0	5.7	4.8	4.1	4.5
23	10.6	9.2	9.8	8.0	7.5	7.7	6.1	4.8	5.4	5.0	4.3	4.6
24	9.2	7.4	8.2	7.6	6.4	7.1	4.8	4.0	4.3	5.4	4.2	4.8
25	8.7	7.3	7.9	6.8	6.2	6.4	5.2	4.3	4.7	5.8	5.2	5.5
26	8.6	7.0	7.9	6.7	6.0	6.3	5.7	4.7	5.1	6.1	5.2	5.7
27	8.6	7.5	8.1	6.0	5.0	5.4	6.6	5.4	5.9	5.3	4.8	5.0
28	9.2	8.4	8.9	6.8	5.6	6.2	6.6	6.0	6.2	4.8	4.1	4.4
29	9.8	9.0	9.4	7.0	6.7	6.9	7.1	5.9	6.5	4.2	3.3	3.6
30	10.4	9.7	10.0	7.2	6.6	6.9	7.1	6.1	6.5	4.0	3.1	3.5
31	10.8	9.9	10.4	---	---	---	7.2	7.0	7.0	4.2	3.0	3.6
MONTH	14.7	7.0	10.5	11.3	4.2	7.8	7.4	4.0	6.1	8.0	3.0	5.5

UMPQUA RIVER BASIN

14318000 LITTLE RIVER AT PEEL, OR--Continued

WATER TEMPERATURE, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	5.2	4.1	4.6	4.4	3.0	3.8	8.8	6.1	7.3	9.7	7.4	8.4
2	---	3.5	---	4.5	2.5	3.5	9.3	6.4	7.8	11.5	7.2	9.4
3	---	---	---	5.0	2.8	3.9	9.6	6.6	8.0	11.4	8.8	10.2
4	---	---	---	5.7	3.5	4.6	9.8	6.8	8.3	11.0	7.3	9.3
5	5.0	3.7	4.3	5.6	4.1	4.9	8.7	7.8	8.2	10.2	8.0	9.0
6	5.9	4.5	5.1	6.9	5.5	6.1	8.9	7.4	8.1	10.1	8.1	9.2
7	6.1	5.6	5.8	6.4	4.0	5.2	9.8	7.5	8.5	9.8	6.8	8.5
8	6.3	5.3	5.7	4.5	3.2	3.9	9.8	6.8	8.4	10.0	6.1	8.3
9	5.9	4.8	5.3	5.2	3.3	4.3	9.8	8.4	9.0	9.7	7.7	8.4
10	6.3	4.8	5.6	6.1	4.5	5.3	9.3	7.9	8.7	10.5	7.2	8.7
11	6.3	5.6	6.0	7.2	5.8	6.5	9.7	8.2	8.9	11.6	7.3	9.6
12	6.0	4.8	5.6	7.0	5.3	6.3	10.6	8.2	9.3	13.4	9.0	11.3
13	6.1	5.1	5.6	5.3	4.4	4.9	9.8	9.2	9.5	13.2	10.0	11.3
14	5.1	3.9	4.5	5.6	4.3	4.9	9.5	6.9	8.2	12.1	8.1	10.3
15	5.5	3.8	4.6	5.2	4.2	4.7	6.9	6.0	6.4	12.0	9.1	10.8
16	6.0	5.0	5.5	4.7	3.8	4.2	6.4	5.5	6.0	12.8	8.8	11.0
17	6.1	5.6	5.9	4.7	3.3	4.0	6.3	5.4	5.8	14.0	10.8	12.5
18	6.7	5.8	6.2	5.0	3.5	4.3	7.5	5.1	6.2	13.5	11.3	12.1
19	6.4	6.0	6.3	6.7	4.4	5.4	8.0	5.6	6.6	11.8	10.6	11.1
20	7.2	6.0	6.6	6.9	4.5	5.7	8.9	6.2	7.3	11.8	9.8	10.9
21	7.7	6.8	7.2	7.3	5.2	6.2	9.3	5.7	7.4	11.2	9.9	10.6
22	7.7	6.4	7.1	7.2	5.4	6.3	9.9	6.6	8.1	11.4	9.1	10.3
23	7.6	6.8	7.2	7.0	5.7	6.4	10.2	7.5	8.7	12.5	8.3	10.6
24	7.0	5.5	6.4	7.1	5.8	6.4	9.8	6.0	7.9	13.5	9.9	11.7
25	5.7	4.5	5.1	7.4	5.2	6.3	10.8	7.2	8.9	14.6	11.3	13.0
26	6.3	4.7	5.4	7.9	5.3	6.5	9.5	7.4	8.3	16.4	12.7	14.5
27	5.6	4.3	5.0	8.0	6.4	7.1	8.3	7.0	7.6	15.8	13.6	14.3
28	5.3	4.1	4.7	7.8	5.4	6.5	9.2	5.7	7.4	13.8	12.6	13.4
29	---	---	---	8.4	6.2	7.1	9.7	6.4	8.1	17.2	13.1	14.8
30	---	---	---	8.2	5.6	6.8	9.1	8.0	8.4	16.2	14.6	15.4
31	---	---	---	8.1	5.5	6.7	---	---	---	16.9	13.7	15.3
MONTH	---	---	---	8.4	2.5	5.4	10.8	5.1	7.9	17.2	6.1	11.1
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	17.1	13.9	15.4	21.4	18.1	19.9	21.7	19.2	20.7	19.4	16.9	18.2
2	17.1	13.9	15.5	21.1	17.9	19.8	21.2	18.8	20.1	20.0	17.5	18.8
3	16.0	13.2	14.7	20.6	17.8	19.3	20.0	17.6	18.8	19.4	17.6	18.5
4	18.2	13.9	16.0	19.7	17.4	18.8	18.8	17.5	18.1	17.6	15.6	16.5
5	18.7	15.6	17.1	20.0	16.7	18.6	17.8	16.2	17.1	16.6	14.4	15.6
6	18.2	15.5	17.0	20.6	17.7	19.4	18.7	15.8	17.2	16.3	14.0	15.2
7	16.4	13.4	15.1	20.2	18.6	19.4	18.6	15.7	17.3	16.4	14.2	15.4
8	14.8	11.9	13.0	21.0	17.8	19.5	19.0	16.2	17.8	15.6	13.4	14.5
9	14.2	10.9	12.3	22.2	18.4	20.4	20.0	16.9	18.6	15.6	13.0	14.5
10	16.6	12.0	14.2	24.1	20.4	22.3	21.4	18.3	20.0	16.6	13.9	15.4
11	18.5	13.8	16.1	24.3	21.9	23.3	22.1	19.0	20.6	17.2	14.8	16.1
12	20.3	15.5	17.9	24.0	22.0	23.2	21.5	18.6	20.3	18.1	15.6	16.9
13	21.1	17.0	19.1	24.2	22.2	23.3	21.5	19.3	20.6	18.4	16.1	17.4
14	20.0	16.9	18.6	23.1	20.6	21.9	22.8	19.6	21.3	18.1	16.7	17.5
15	19.6	16.3	18.1	22.3	20.0	21.3	22.5	19.8	21.3	17.4	16.3	16.7
16	19.3	16.7	18.1	22.5	20.0	21.4	21.8	19.2	20.6	17.3	15.7	16.5
17	18.7	15.4	16.6	22.6	20.3	21.6	21.2	18.4	19.9	17.0	16.1	16.5
18	16.5	14.5	15.3	22.6	20.3	21.5	20.2	18.4	19.4	17.1	15.2	16.2
19	17.3	13.0	15.2	21.9	20.4	20.9	19.3	17.0	18.3	16.8	14.6	15.9
20	18.3	14.6	16.5	21.7	18.5	20.3	19.0	17.4	18.2	16.2	14.7	15.6
21	17.8	15.6	16.7	22.4	19.5	21.1	19.7	17.2	18.4	15.5	14.1	14.9
22	17.5	16.1	16.5	22.7	20.6	21.8	19.3	16.9	18.2	15.8	13.8	14.8
23	19.3	15.2	17.1	23.2	20.9	22.1	19.6	17.0	18.4	16.0	14.0	15.1
24	20.6	17.1	18.7	23.1	21.0	22.2	19.7	17.4	18.7	15.6	13.6	14.7
25	21.7	17.4	19.6	22.8	20.9	22.0	19.4	18.1	18.8	15.3	13.2	14.4
26	22.2	18.6	20.5	23.4	20.7	22.2	20.7	18.0	19.3	15.1	13.1	14.3
27	21.8	19.1	20.6	22.8	20.7	21.9	20.4	17.9	19.3	15.4	13.5	14.4
28	21.0	18.8	19.8	22.3	19.5	21.1	20.7	18.1	19.5	14.8	13.0	14.0
29	20.9	18.7	19.8	23.5	20.6	22.2	21.3	18.9	20.1	14.1	12.7	13.2
30	21.1	18.7	20.0	24.0	21.3	22.8	20.6	18.4	19.5	13.2	12.1	12.6
31	---	---	---	23.3	21.2	22.2	19.2	16.8	18.2	---	---	---
MONTH	22.2	10.9	17.0	24.3	16.7	21.2	22.8	15.7	19.2	20.0	12.1	15.7

14319500 NORTH UMPQUA RIVER AT WINCHESTER, OR

LOCATION.--Lat 43°16'20", long 123°24'40", in NW 1/4 NE 1/4 sec.33, T.26 S., R.6 W., Douglas County, Hydrologic Unit 17100301, on left bank 300 ft downstream from county bridge, 3.0 mi west of Winchester, and at mile 1.8.

DRAINAGE AREA.--1,344 mi².

PERIOD OF RECORD.--October 1908 to December 1913, October 1923 to September 1929, August 1954 to current year. Prior to December 1908, monthly discharge only, published in WSP 1318.

REVISED RECORDS.--WSP 1448: 1909-12, drainage area. WDR OR-65-1: 1954(M). WDR OR-72-1: 1965(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 372.97 ft above NGVD of 1929 (Douglas County Road Department bench mark). Oct. 1, 1908, to Dec. 31, 1913, and Oct. 1, 1923, to Sept. 30, 1929, nonrecording gage at site 4.8 mi upstream at different datums. Aug. 27, 1954, to Aug. 12, 1965, water-stage recorder on right bank at same datum.

REMARKS.--No estimated daily discharges. Records good. Occasional regulation caused by upstream powerplants; slight regulation by Lemolo Lake and Diamond Lake. Several small diversions for irrigation upstream from station. Continuous water-quality records for water years 1967-69, 1971-91, have been collected at this site.

AVERAGE DISCHARGE.--59 years (water years 1909-13, 1924-29, 1955-2002), 3,718 ft³/s, 37.59 in/yr, 2,694,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 150,000 ft³/s Dec. 22, 1964, gage height, 34.2 ft, from floodmark; minimum discharge, 235 ft³/s Aug. 27, 1987, result of regulation at Winchester Dam 5.2 mi upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 29, 1950, reached a stage of 23.2 ft, from floodmark, at site 4.8 mi upstream at different datum, discharge, 88,000 ft³/s. Flood of Nov. 23, 1953, reached a stage of 28.4 ft, from floodmarks, present site and datum, discharge, 93,300 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	0630	*35,400	*14.27	Apr. 14	1500	21,100	10.33
Dec. 17	1030	22,900	10.86				

Minimum discharge, 664 ft³/s Sept. 2.

DISCHARGE, in CFS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	756	1700	5990	7330	3530	3710	3740	2830	2440	1150	807	686
2	752	1440	7660	8100	3620	3290	3810	2780	2340	1090	801	682
3	744	1220	5310	7960	3570	2920	4040	2780	2110	1070	802	681
4	744	1110	4490	6180	3640	2750	4240	2820	2030	1070	805	685
5	714	1060	6790	4990	3620	2620	4470	2770	1940	1080	813	688
6	720	1040	9690	7480	3580	2760	4580	2700	1890	1110	815	691
7	723	1010	12500	10900	5590	4070	4310	2590	1840	1080	810	718
8	728	996	6930	15600	12100	3880	3960	2500	1820	1020	807	747
9	736	982	5780	12600	8440	3380	3780	2410	1770	998	789	738
10	738	976	4910	8170	6250	3060	4520	2330	1680	989	758	722
11	775	1020	4530	6130	5420	3210	4970	2220	1570	984	750	711
12	990	1030	5130	5240	5000	6860	5050	2170	1510	1000	739	700
13	871	1100	6320	4840	4530	7340	4870	2220	1510	1010	736	695
14	822	1340	25400	4420	4400	6370	14500	2330	1470	1000	731	698
15	790	1520	12300	3990	4160	5610	12400	2360	1450	978	727	698
16	816	1540	11900	3460	4030	5200	8490	2330	1480	958	725	695
17	843	2940	19300	3300	4130	4740	7460	2300	1490	945	728	749
18	842	2060	12600	3110	3980	4080	7110	2340	1680	925	729	1010
19	845	1530	9070	3220	4210	3770	6260	2390	2060	934	730	960
20	813	1420	7590	3600	7210	4050	5580	2420	1830	930	741	819
21	814	2280	6350	7410	7170	5030	4950	2390	1530	901	740	781
22	824	6610	5260	7140	7330	6120	4420	2420	1400	889	742	769
23	1660	8630	4420	5360	8070	6520	4090	2290	1340	890	740	761
24	1620	3980	3680	4410	7590	8400	3800	2100	1290	882	728	754
25	1140	4140	3250	6200	6210	7720	3510	1960	1300	877	722	752
26	997	4490	3050	14500	5210	6310	3350	1930	1280	867	721	752
27	945	3380	2930	8420	4570	5450	3420	2010	1290	858	718	751
28	926	4190	3840	5980	4140	4750	3280	2180	1250	840	715	752
29	939	11200	4520	4680	---	4240	3040	2340	1260	829	721	763
30	996	6460	4890	3890	---	3990	2920	2690	1250	824	715	778
31	1810	---	6850	3430	---	3810	---	2720	---	815	701	---
TOTAL	28433	82394	233230	202040	151300	146010	154920	74620	49100	29793	23306	22386
MEAN	917.2	2746	7524	6517	5404	4710	5164	2407	1637	961.1	751.8	746.2
MAX	1810	11200	25400	15600	12100	8400	14500	2830	2440	1150	815	1010
MIN	714	976	2930	3110	3530	2620	2920	1930	1250	815	701	681
AC-FT	56400	163400	462600	400700	300100	289600	307300	148000	97390	59090	46230	44400
CFSM	0.68	2.04	5.60	4.85	4.02	3.50	3.84	1.79	1.22	0.72	0.56	0.56
IN.	0.79	2.28	6.46	5.59	4.19	4.04	4.29	2.07	1.36	0.82	0.65	0.62

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2002, BY WATER YEAR (WY)

	1355	4101	6332	6734	6234	5566	4818	3860	2444	1338	997.1	982.8
MEAN	1355	4101	6332	6734	6234	5566	4818	3860	2444	1338	997.1	982.8
MAX	2752	12550	23640	15220	13250	12880	8881	7147	4992	2824	1578	1689
(WY)	1963	1974	1965	1965	1986	1972	1993	1963	1984	1913	1976	1986
MIN	683	931	1005	1125	1019	1681	1605	1401	913	717	635	695
(WY)	1988	1994	1977	1977	1977	1992	1926	1926	1926	1926	1992	2001

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1909 - 2002

ANNUAL TOTAL	818370	1197532	
ANNUAL MEAN	2242	3281	3718
HIGHEST ANNUAL MEAN			6116
LOWEST ANNUAL MEAN			1639
HIGHEST DAILY MEAN	25400	Dec 14	25400
LOWEST DAILY MEAN	636	Sep 7	681
ANNUAL SEVEN-DAY MINIMUM	640	Sep 4	688
ANNUAL RUNOFF (AC-FT)	1623000	2375000	2694000
ANNUAL RUNOFF (CFSM)	1.67	2.44	2.77
ANNUAL RUNOFF (INCHES)	22.65	33.15	37.59
10 PERCENT EXCEEDS	4430	7190	7530
50 PERCENT EXCEEDS	1640	2330	2420
90 PERCENT EXCEEDS	714	739	886

UMPQUA RIVER BASIN

14321000 UMPQUA RIVER NEAR ELKTON, OR

LOCATION.--Lat 43°35'10", long 123°33'15", in NW 1/4 sec.8, T.23 S., R.7 W., Douglas County, Hydrologic Unit 17100303, on left bank 3.5 mi south of Elkton, 8.3 mi upstream from Elk Creek, and at mile 56.9.

DRAINAGE AREA.--3,683 mi².

PERIOD OF RECORD.--October 1905 to current year.

REVISED RECORDS.--WSP 1184: 1927(M), 1938(M), 1943(M), 1946(M). WSP 1448: 1911-13, drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 90.42 ft above NGVD of 1929. Prior to June 29, 1972, at site 2,400 ft downstream at same datum. See WSP 1931 or 2135 for history of changes prior to June 29, 1972.

REMARKS.--Records good. Regulation by powerplants on North Umpqua River ordinarily does not affect discharge at this station. Diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--97 years (water years 1906-2002), 7,391 ft³/s, 27.27 in/yr, 5,355,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 265,000 ft³/s Dec. 23, 1964, gage height, 51.95 ft, from floodmarks; minimum discharge observed, 640 ft³/s July 18, 1926.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least December 1861, 51.95 ft on Dec. 23, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 52,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	1830	*65,200	*22.06	No other peak greater than base discharge.			
Minimum recorded discharge, 850 ft ³ /s Sept. 4.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1010	2070	11700	16900	8330	6900	6430	4420	3400	1480	970	871
2	1000	1980	17500	15600	8310	6210	6280	4270	3100	1400	967	868
3	977	1850	13700	17100	8040	5580	6330	4180	2940	1330	951	868
4	952	1580	10900	13900	7830	5080	6590	4120	2690	1300	954	859
5	939	1440	15700	11000	7750	4770	6810	4110	2580	1280	964	866
6	922	1350	21300	12600	e7590	4740	7150	3990	2430	1270	976	874
7	910	1300	25900	29600	e11500	5500	6930	3870	2350	1300	978	885
8	919	1270	16600	31600	e33600	6930	6470	3700	2290	1280	979	905
9	919	1240	12200	34600	27200	6240	5990	e3860	2260	1230	973	939
10	931	1220	10500	21600	18200	5650	5980	e3720	2190	1200	962	960
11	953	1210	9690	15300	13800	5570	7060	3310	2100	1180	939	951
12	961	1240	10100	12100	e11100	7870	7140	3150	1980	1160	921	934
13	1120	1290	11400	10600	e9820	14300	7100	3070	1900	1170	912	928
14	1120	1380	43600	9360	e9230	14600	11600	3100	1850	1180	904	923
15	1060	1610	38500	8390	e8560	12500	22300	3200	1800	1170	895	916
16	1060	1880	23400	7350	7980	11300	14900	3200	1770	1150	891	912
17	1050	2290	36500	6600	7710	11100	12000	3150	1790	1130	888	954
18	1060	3600	37100	6180	7590	10400	11600	e3550	1810	1120	895	978
19	1050	2910	27000	5880	7130	9260	10900	e3630	1980	1090	898	1110
20	1050	2190	20400	6740	9460	8610	9600	e3760	2330	1090	899	1230
21	1040	1980	16300	12900	12800	9270	8600	e3750	2210	1090	904	1070
22	1060	e9730	12700	21100	13300	10900	7670	e3800	1880	1070	888	1040
23	1110	e14100	10500	16400	13100	11800	6890	e3580	1730	1060	890	1050
24	1740	e6900	8840	12900	13500	13000	6380	3140	1650	1050	895	1030
25	1800	e7270	7600	12900	11800	14700	5870	2860	1590	1050	889	998
26	1540	e8870	6750	32500	9760	12300	5430	2660	e1730	1050	889	981
27	1380	7880	6180	27300	8460	10300	7620	2620	e1730	1040	888	968
28	1270	6460	6240	17800	7580	8940	5280	2740	1530	1030	888	964
29	1230	18200	8480	13300	---	7880	5000	2940	1500	1010	888	964
30	1270	18000	9630	10500	---	7190	4620	3130	1490	999	880	966
31	1370	---	12100	8870	---	6720	---	3480	---	977	878	---
TOTAL	34773	134290	519010	479470	321030	276110	240170	108060	62580	35936	28493	28760
MEAN	1122	4476	16740	15470	11470	8907	8006	3486	2086	1159	919	959
MAX	1800	18200	43600	34600	33600	14700	22300	4420	3400	1480	979	1230
MIN	910	1210	6180	5880	7130	4740	4620	2620	1490	977	878	859
AC-FT	68970	266400	1029000	951000	636800	547700	476400	214300	124100	71280	56520	57050
CFSM	0.30	1.22	4.55	4.20	3.11	2.42	2.17	0.95	0.57	0.31	0.25	0.26
IN.	0.35	1.36	5.24	4.84	3.24	2.79	2.43	1.09	0.63	0.36	0.29	0.29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1906 - 2002, BY WATER YEAR (WY)

	1868	7027	13420	15840	14980	12140	9510	6497	3730	1722	1177	1196
MEAN	1868	7027	13420	15840	14980	12140	9510	6497	3730	1722	1177	1196
MAX	14200	29500	51220	34900	32800	27100	20480	15800	9526	5063	1867	3475
(WY)	1951	1974	1965	1956	1907	1972	1937	1921	1953	1913	1976	1920
MIN	857	832	1238	1440	1365	2909	2432	1934	1053	742	703	740
(WY)	1930	1930	1977	1977	1977	1992	1926	1934	1926	1926	1931	1931

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1906 - 2002

ANNUAL TOTAL	1399223	2268682	
ANNUAL MEAN	3833	6216	
HIGHEST ANNUAL MEAN			7391
LOWEST ANNUAL MEAN			13360
HIGHEST DAILY MEAN	43600	Dec 14	43600
LOWEST DAILY MEAN	899	Sep 11	859
ANNUAL SEVEN-DAY MINIMUM	902	Sep 5	869
ANNUAL RUNOFF (AC-FT)	2775000		4500000
ANNUAL RUNOFF (CFSM)	1.04		1.69
ANNUAL RUNOFF (INCHES)	14.13		22.91
10 PERCENT EXCEEDS	7930		14200
50 PERCENT EXCEEDS	2300		3150
90 PERCENT EXCEEDS	938		930

e Estimated

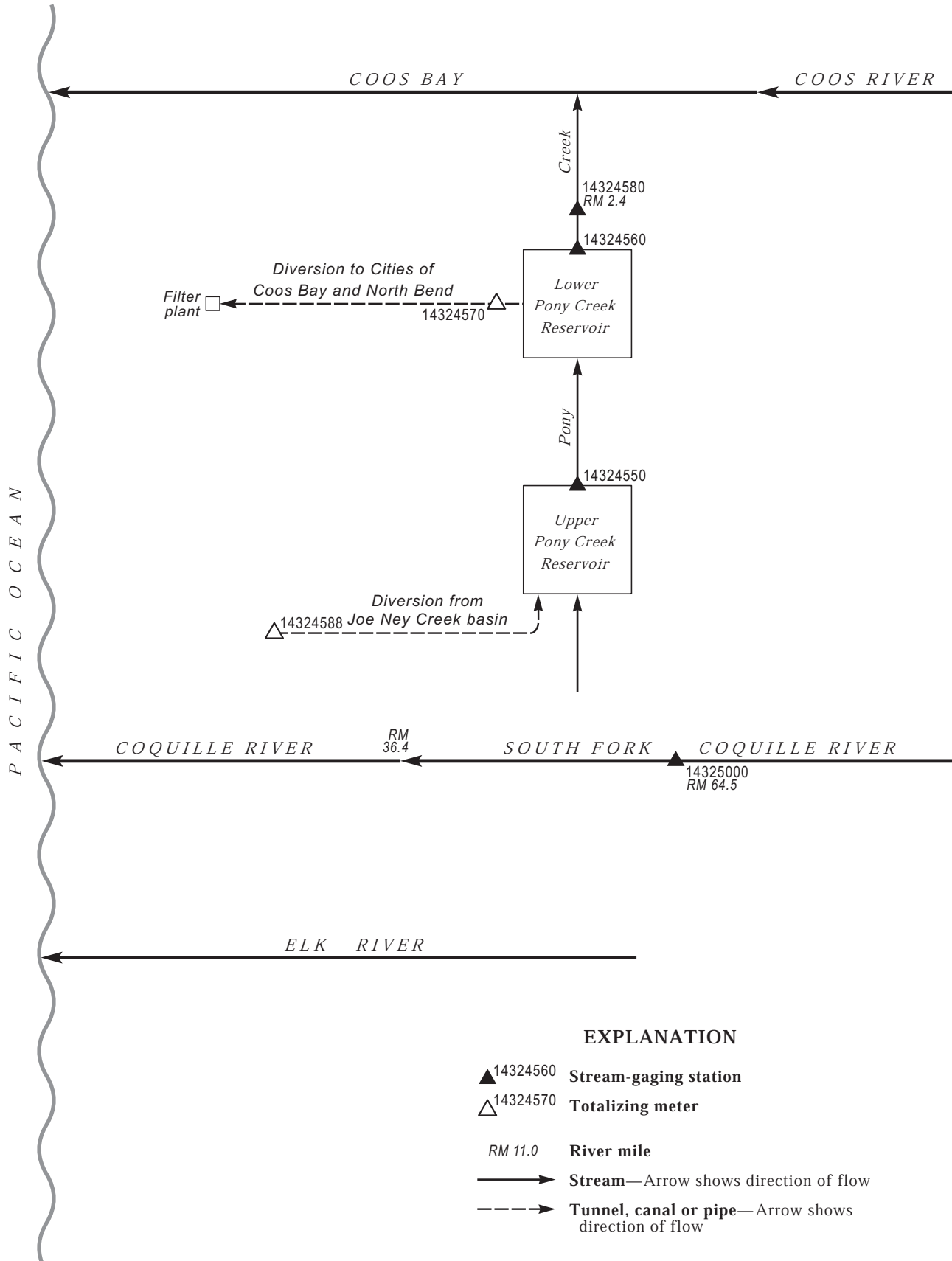


Figure 32. Schematic diagram showing gaging stations and diversions in the Pony Creek Basin.

14324580 PONY CREEK AT COOS BAY, OR

LOCATION.--Lat 43°22'44", long 124°14'29", in NE 1/4 NE 1/4 sec.28, T.25 S., R.13 W., Coos County, Hydrologic Unit 17100304, at spillway for Lower Pony Creek Reservoir, in Coos Bay, and at mile 2.3.

DRAINAGE AREA.--3.88 mi².

PERIOD OF RECORD.--July 1975 to current year.

REVISED RECORDS.--WDR OR-93-1: Drainage Area.

GAGE.--Water-stage recorder. Datum of gage is NAVD of 1988 (Coos Bay-North Bend Water Board bench mark). Oct. 1, 1982 to September 30, 1987, gage at site 500 ft downstream at datum 2.9 ft higher. July 1975 to Sept. 30, 1982 and Oct. 1, 1987 to Sept. 30, 1992, at site 0.1 mi downstream, at datum 15.13 ft above NGVD of 1929. Oct. 1, 1992 to July 19, 2001 at same site at datum 2.9 ft higher.

REMARKS.--No estimated daily discharges. Records good. Records prior to 1993 were computed for site at the lower end of culvert under Ocean Boulevard. Flow regulated by Upper and Lower Pony Creek Reservoirs (stations 14324550 and 14324560), diversion upstream from station from Lower Pony Creek Reservoir to municipal water supply of Coos Bay-North Bend (station 14323570) and diversion into the basin from Joe Ney Creek (station 14324590). Approximately 5.5 ft³/s is diverted to the Coos Bay-North Bend water treatment plant, maximum capacity, 10.8 ft³/s.

COOPERATION.--Data for diversion from Joe Ney Creek into Pony Creek (14324590), diversion from Lower Pony Creek Reservoir to City of Coos Bay (14324570) and contents of Upper Pony Creek Reservoir provided by Coos Bay-North Bend Water Board.

AVERAGE DISCHARGE.--27 years (water years 1976-2002), 10.24 ft³/s, 35.66 in/yr, 7,400 acre-ft/yr, adjusted for Joe Ney diversion into Pony Creek, Coos Bay-North Bend diversion, and change in contents in Upper and Lower Pony Creek Reservoirs.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 181 ft³/s Dec. 6, 1981, gage height, 6.19 ft; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 31 ft³/s Feb. 7, 8, gage height, 41.85 ft; minimum discharge, no flow many days during year.

MONTHLY DISCHARGE OF PONY CREEK, JOE NEY CREEK DIVERSION, PONY CREEK DIVERSION AND MONTHLY CHANGE IN CONTENTS OF RESERVOIRS NEAR COOS BAY, OR, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

	14324588 Diversion from Joe Ney Creek into Pony Creek (acre-feet)	14324580 Pony Creek at Coos Bay (acre-feet)	14324570 Diversion from Lower Pony Creek Reservoir to City of Coos Bay (acre-feet)	14324560 Lower Pony Creek Reservoir Change in Contents (acre-feet)	14324550 Upper Pony Creek Reservoir Change in Contents (acre-feet)	Pony Creek adjusted for diversion and change in contents (acre-feet) (inches)	
October.....	0	0	307.8	+9.5	-197.0	120.3	0.58
November.....	32.9	0	209.5	+35.6	+6.0	284.0	1.37
December.....	44.0	54.1	285.1	-4.1	+953.0	1,332.1	6.41
CAL YR 2001...	1117.6	54.1	3,965.4	+37.6	+669.0	5,843.7	28.10
January.....	59.7	274.9	276.9	+53.1	+1,400.0	2,064.6	9.93
February.....	0	740.4	262.2	-15.7	+630.0	1,616.9	7.78
March.....	0.4	514.0	297.4	0	+40.0	851.8	4.10
April.....	0	162.8	319.9	-3.6	+110.0	589.1	2.83
May.....	0	152.4	395.6	+2.7	-110.0	440.7	2.12
June.....	0	312.3	424.7	+8.8	-340.0	405.8	1.95
July.....	0	640.1	519.6	+9.6	-700.0	469.3	2.26
August.....	0	318.0	514.5	-66.2	-1,060.0	-293.7	-1.41
September.....	0	0	426.4	+1.8	-460.0	-31.8	-0.16
WTR YR 2002...	137.0	3,169.0	4,239.6	+31.5	+272	7,849.1	37.75

DISCHARGE, in CFS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	17	2.1	3.2	1.9	4.4	7.4	16	0.00
2	0.00	0.00	0.00	0.00	16	2.2	2.1	2.0	6.0	7.8	14	0.00
3	0.00	0.00	0.07	0.00	15	2.7	2.5	1.2	3.9	9.3	18	0.00
4	0.00	0.00	0.53	0.00	13	1.7	2.7	1.4	1.3	8.7	19	0.00
5	0.00	0.00	3.2	0.00	12	0.95	2.7	2.9	1.3	8.4	14	0.00
6	0.00	0.00	2.8	0.85	12	5.1	2.6	2.2	0.92	8.4	4.0	0.00
7	0.00	0.00	1.1	12	22	6.6	3.2	0.92	0.62	8.9	0.00	0.00
8	0.00	0.00	0.54	10	26	4.0	2.5	1.4	1.2	6.8	1.4	0.00
9	0.00	0.00	1.3	5.5	23	3.9	2.3	2.7	3.3	5.3	6.7	0.00
10	0.00	0.00	0.77	3.0	21	5.4	3.5	3.0	2.1	9.6	9.9	0.00
11	0.00	0.00	0.45	1.4	18	7.6	3.0	3.3	0.47	9.1	10	0.00
12	0.00	0.00	0.17	0.86	20	7.2	2.4	4.6	0.55	10	9.1	0.00
13	0.00	0.00	0.27	0.45	20	12	2.0	3.6	1.1	8.8	5.0	0.00
14	0.00	0.00	2.4	0.25	19	16	7.4	2.0	1.8	10	2.4	0.00
15	0.00	0.00	2.1	0.06	17	15	3.0	2.5	3.5	10	2.0	0.00
16	0.00	0.00	1.8	0.00	12	16	3.7	1.9	6.1	9.6	2.8	0.00
17	0.00	0.00	1.9	0.00	10	16	6.2	2.2	4.1	10	3.0	0.00
18	0.00	0.00	1.3	0.37	8.8	14	4.9	2.3	3.3	8.3	2.9	0.00
19	0.00	0.00	3.1	0.36	8.0	13	3.2	3.4	7.1	7.6	2.1	0.00
20	0.00	0.00	2.3	1.1	8.1	12	2.9	2.2	9.4	7.6	2.7	0.00
21	0.00	0.00	0.66	6.8	8.5	12	2.9	1.7	10	7.4	2.0	0.00
22	0.00	0.00	0.26	4.6	8.1	12	1.8	2.1	10	9.2	2.5	0.00
23	0.00	0.00	0.27	5.6	9.1	13	0.84	2.4	12	6.5	2.2	0.00
24	0.00	0.00	0.00	6.5	9.2	15	0.56	2.3	9.0	12	1.8	0.00
25	0.00	0.00	0.00	14	7.8	12	0.89	2.5	7.1	13	2.5	0.00
26	0.00	0.00	0.00	15	6.0	9.4	1.2	3.3	7.5	15	3.8	0.00
27	0.00	0.00	0.00	12	3.9	7.5	2.0	1.9	7.3	17	0.54	0.00
28	0.00	0.00	0.00	11	2.8	4.9	3.2	1.5	9.1	19	0.00	0.00
29	0.00	0.00	0.00	10	---	3.6	1.6	3.5	11	19	0.00	0.00
30	0.00	0.00	0.00	8.3	---	3.2	1.1	4.3	12	18	0.00	0.00
31	0.00	---	0.00	8.6	---	3.1	---	3.7	---	15	0.00	---
TOTAL	0.00	0.00	27.29	138.60	373.3	259.15	82.09	76.82	157.46	322.7	160.34	0.00
MEAN	0.000	0.000	0.880	4.471	13.33	8.360	2.736	2.478	5.249	10.41	5.172	0.000
MAX	0.00	0.00	3.2	15	26	16	7.4	4.6	12	19	19	0.00
MIN	0.00	0.00	0.00	0.00	2.8	0.95	0.56	0.92	0.47	5.3	0.00	0.00
AC-FT	0.00	0.00	54	275	740	514	163	152	312	640	318	0.00
CAL YR 2001	TOTAL	27.29	MEAN	0.075	MAX	3.2	MIN	0.00	AC-FT	54		
WTR YR 2002	TOTAL	1597.75	MEAN	4.377	MAX	26	MIN	0.00	AC-FT	3170		

COQUILLE RIVER BASIN

14325000 SOUTH FORK COQUILLE RIVER AT POWERS, OR

LOCATION.--Lat 42°53'30", long 124°04'10", in SE 1/4 sec.12, T.31 S., R.12 W., Coos County, Hydrologic Unit 17100305, on left bank 0.6 mi downstream from highway bridge at Powers, 0.9 mi upstream from Woodward Creek, and at mile 64.5.

DRAINAGE AREA.--169 mi².

PERIOD OF RECORD.--September 1916 to September 1926, December 1928 to current year.

REVISED RECORDS.--WSP 1184: 1946(M). WSP 1448: 1917-18(M), 1919, 1920(M), 1925.

GAGE.--Water-stage recorder. Datum of gage is 197.42 ft above NGVD of 1929. Prior to Nov. 17, 1938, nonrecording gage at various sites within 1 mi of present site at different datums. National weather Service telephone telemeter at station.

REMARKS.--Records good except for estimated daily discharges, which are fair. No regulation. Small diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--83 years (water years 1917-26, 1930-2002), 782 ft³/s, 62.83 in/yr, 566,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48,900 ft³/s Dec. 22, 1964, gage height, 26.51 ft, from floodmarks, from rating curve extended above 19,000 ft³/s on basis of contracted-opening measurement at gage height 18.14 ft and slope-area measurement of peak flow; minimum discharge, 6.4 ft³/s Oct. 10-12, 1995.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 9,300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 13	2330	*9,750	*9.69	Feb. 7	1930	9,390	9.51

Minimum discharge, 12 ft³/s Sept. 26-29.

DISCHARGE, in CFS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	440	5230	1340	1500	535	538	338	90	51	23	18
2	21	185	4430	1880	1260	481	497	316	87	47	23	17
3	20	106	3030	1670	1520	436	457	298	83	44	22	17
4	20	79	2180	e1350	1340	399	417	273	80	43	23	16
5	20	67	4990	e1190	1170	375	384	253	78	41	24	16
6	20	61	3700	e3710	1190	647	364	241	77	41	28	16
7	20	55	2320	e4990	4910	958	338	227	73	40	28	16
8	20	50	1610	e6630	5130	711	313	210	71	39	26	16
9	20	47	1370	e3100	2640	637	327	198	75	38	23	16
10	20	44	1320	e2200	1760	994	484	189	70	37	23	15
11	23	42	1590	e1760	e1350	1740	442	181	68	35	23	15
12	27	59	1480	e1500	1140	2950	407	170	65	35	21	15
13	25	459	3000	e1400	1000	2150	372	160	63	35	18	15
14	23	1310	6430	e1300	898	1760	1060	153	60	34	19	14
15	22	794	2880	e1200	813	1390	978	144	59	32	19	14
16	22	1300	2840	e1100	802	1230	969	136	58	31	18	14
17	22	771	5980	e1000	773	1250	1140	132	56	30	18	14
18	21	487	3700	e900	760	1110	1190	127	70	30	18	17
19	20	454	3210	e800	939	943	1040	122	75	30	18	21
20	20	733	2370	e800	1300	941	920	128	64	30	19	17
21	20	1300	1740	e1310	1150	1000	810	121	61	29	19	15
22	21	4300	1600	e1400	1020	1070	712	119	59	28	18	15
23	49	2120	1570	e1200	1130	1090	628	111	58	28	18	14
24	50	1260	1290	e1050	1070	1230	556	105	56	27	18	13
25	38	2360	1060	e2000	894	1120	493	100	55	27	18	13
26	32	1800	889	5440	762	953	442	96	49	27	18	13
27	29	1110	820	2570	666	836	485	94	47	27	18	12
28	29	3010	1240	1680	593	749	436	97	48	27	18	13
29	31	5690	1100	1250	---	680	393	107	50	26	16	13
30	229	2810	1020	1000	---	622	364	108	58	25	18	14
31	495	---	1380	865	---	578	---	96	---	23	18	---
TOTAL	1451	33303	77369	59585	39480	31565	17956	5150	1963	1037	631	454
MEAN	46.81	1110	2496	1922	1410	1018	598.5	166.1	65.43	33.45	20.35	15.13
MAX	495	5690	6430	6630	5130	2950	1190	338	90	51	28	21
MIN	20	42	820	800	593	375	313	94	47	23	16	12
AC-FT	2880	66060	153500	118200	78310	62610	35620	10220	3890	2060	1250	901
CFSM	0.28	6.57	14.8	11.4	8.34	6.03	3.54	0.98	0.39	0.20	0.12	0.09
IN.	0.32	7.33	17.03	13.12	8.69	6.95	3.95	1.13	0.43	0.23	0.14	0.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1917 - 2002, BY WATER YEAR (WY)

MEAN	198.7	1024	1716	1810	1654	1316	913.4	454.6	172.3	61.00	34.57	44.80
MAX	1945	4232	5361	4244	4151	3818	2451	1568	699	186	101	384
(WY)	1951	1974	1965	1970	1958	1938	1963	1953	1937	1947	1947	1978
MIN	11.1	15.8	44.1	97.3	209	330	203	78.3	50.8	27.7	17.4	12.1
(WY)	1988	1937	1977	1977	1977	1934	1990	1939	1924	1926	1939	1987

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1917 - 2002

ANNUAL TOTAL	177902	269944	
ANNUAL MEAN	487.4	739.6	781.5
HIGHEST ANNUAL MEAN			1374
LOWEST ANNUAL MEAN			237
HIGHEST DAILY MEAN	6430	Dec 14	6630
LOWEST DAILY MEAN	20	Oct 3	12
ANNUAL SEVEN-DAY MINIMUM	20	Oct 3	13
ANNUAL RUNOFF (AC-FT)	352900	535400	566200
ANNUAL RUNOFF (CFSM)	2.88	4.38	4.62
ANNUAL RUNOFF (INCHES)	39.16	59.42	62.83
10 PERCENT EXCEEDS	1250	1780	2000
50 PERCENT EXCEEDS	229	185	262
90 PERCENT EXCEEDS	26	18	26

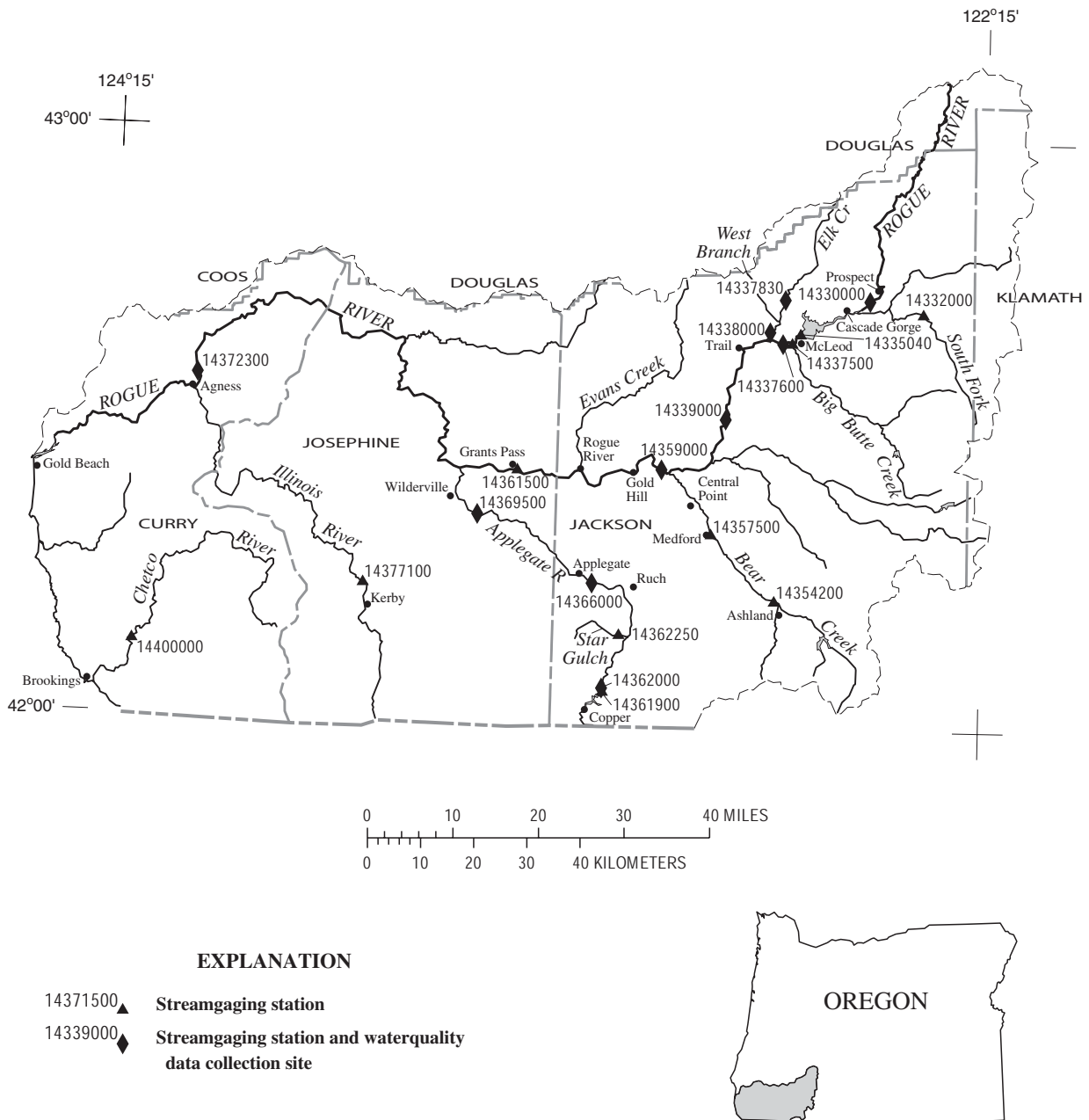


Figure 33. Location of surface-water and water-quality stations in the Rogue and Chetco River Basins.

EXPLANATION

- ▲ 14332000 **Stream-gaging station**
- ◆ 14330000 **Stream-gaging station and water-quality data collection site**
- RM 2.4 **River mile**
- **Stream**—Arrow shows direction of flow
- - -→ **Tunnel, canal or pipe**—Arrow shows direction of flow

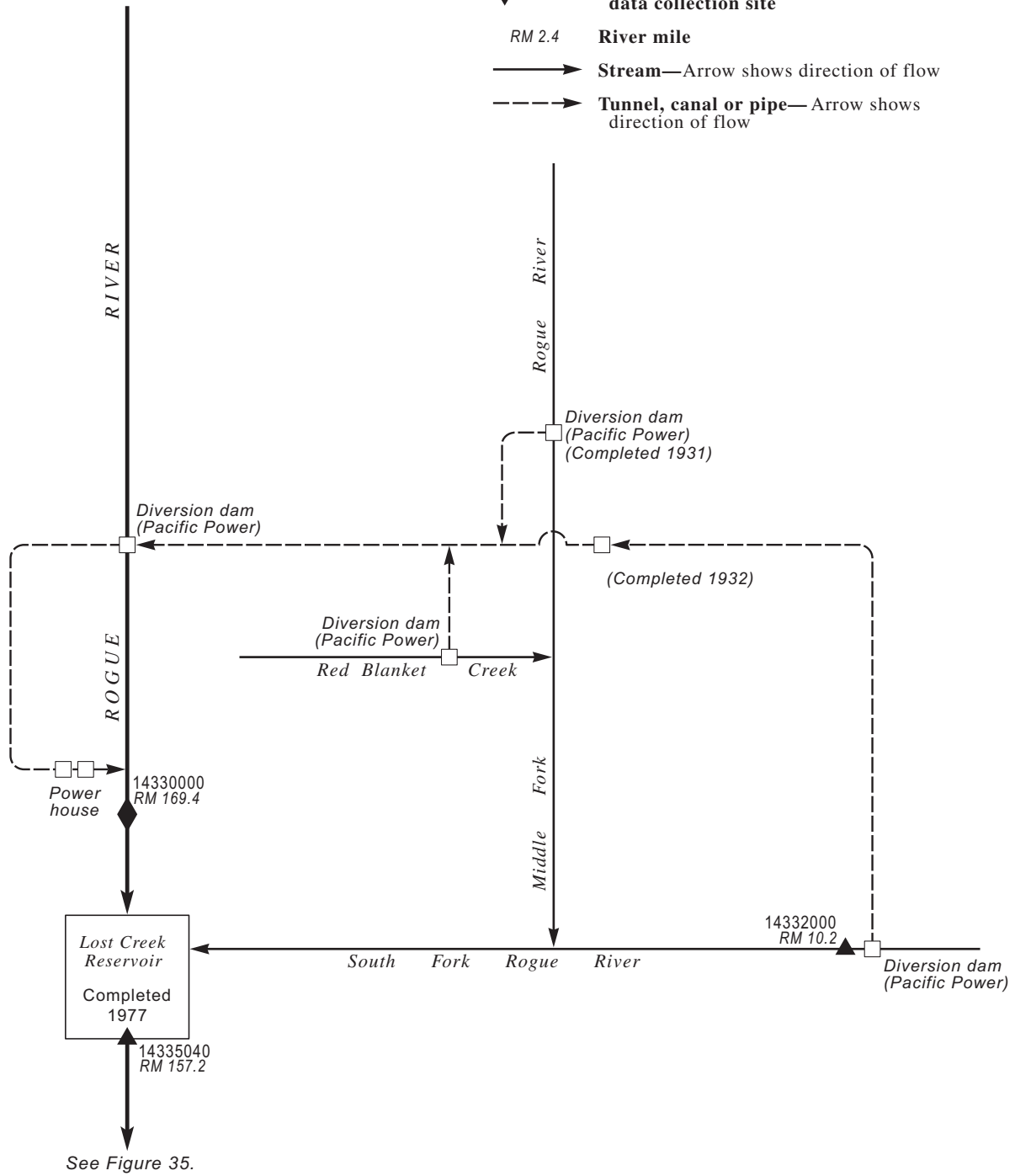


Figure 34. Schematic diagram showing gaging stations in the Rogue River Basin, upstream from Lost Creek Reservoir.

14330000 ROGUE RIVER BELOW PROSPECT, OR

LOCATION.--Lat 42°43'50", long 122°30'55", in SE 1/4 NW 1/4 sec.6, T.33 S., R.3 E., Jackson County, Hydrologic Unit 17100307, on right bank 600 ft downstream from Prospect No. 1 powerplant, 1.4 mi downstream from Mill Creek, 2.0 mi southwest of Prospect, 2.1 mi upstream from South Fork Rogue River, and at mile 169.4.

DRAINAGE AREA.--379 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1913 to September 1930, October 1968 to current year.

REVISED RECORDS.--WSP 1518: 1914-23, 1924(M), 1925, 1928.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,964.56 ft above NGVD of 1929 (Pacific Power and Light Co. bench mark). Prior to September 1927 nonrecording gage at site 1,000 ft upstream, above powerplants, at different datum, also concurrent nonrecording gage on headrace to obtain equivalent combined flow.

REMARKS.--Records fair. Fluctuations caused by powerplant 600 ft upstream from station. Small diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--34 years, (water years 1969-2002), 1,463 ft³/s, 1,060,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,200 ft³/s Jan. 1, 1997, gage height, 8.15 ft; minimum discharge, 166 ft³/s Sept. 29, 1992, result of regulation by upstream diversion gates.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1890, 12.4 ft Dec. 22, 1964, from floodmarks, discharge, 25,000 ft³/s, from records for station upstream from Prospect (station 14328000) and for station downstream from South Fork Rogue River near Prospect (station 14335000) after adjusting for estimated intervening tributary inflow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,130 ft³/s Apr. 14, gage height 5.59 ft; minimum discharge, 371 ft³/s July 28, result of regulation by upstream diversion gates.

DISCHARGE, in CFS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

Table with columns: DAY, OCT, NOV, DEC, JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP. Rows 1-31 showing daily discharge values and summary statistics (TOTAL, MEAN, MAX, MIN, AC-FT).

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2002, BY WATER YEAR (WY)

Table with columns: MEAN, MAX, (WY), MIN, (WY). Rows for years 1969, 1974, 1993, 1995, 1991, 1977.

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR, FOR 2002 WATER YEAR, WATER YEARS 1969 - 2002

Table with columns: ANNUAL TOTAL, ANNUAL MEAN, HIGHEST ANNUAL MEAN, LOWEST ANNUAL MEAN, HIGHEST DAILY MEAN, LOWEST DAILY MEAN, ANNUAL SEVEN-DAY MINIMUM, ANNUAL RUNOFF (AC-FT), 10 PERCENT EXCEEDS, 50 PERCENT EXCEEDS, 90 PERCENT EXCEEDS.

e Estimated

14330000 ROGUE RIVER BELOW PROSPECT, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1976 to September 1981.
 pH: November 1976 to September 1981.
 WATER TEMPERATURE: October 1968 to current year.
 DISSOLVED OXYGEN: October 1979 to September 1981.
 SUSPENDED SEDIMENT DISCHARGE: November 1976 to September 1981 (October to April only, 1980 water year, November to April only, 1981 water year).

INSTRUMENTATION.--Water-quality monitor since November 1976. Automatic pumping sediment sampler November 1976 to April 1981.

REMARKS.--Records good. During low flows and warm weather, water temperatures may be influenced by return flows from hydroelectric plant 600 ft upstream.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 73 microsiemens Sept. 22, 1980; minimum recorded, 28 microsiemens Jan. 13, 1980, may have been lower during period of missing record Jan. 14-17, 1980.
 pH: Maximum recorded, 8.3 units Aug. 10, 1981, may have been higher during period of no record in July and August 1981; minimum, 7.0 units Nov. 30, 1976.
 WATER TEMPERATURE: Maximum, 20.5°C July 20, 1979 (result of regulation); minimum, 0.0°C at times most years.
 DISSOLVED OXYGEN: Maximum, 13.6 mg/L Dec. 8, 1980, Feb. 21, 1981; minimum, 7.2 mg/L June 21, 1980, result of regulation.
 SEDIMENT CONCENTRATION: Maximum daily mean (water years 1977-79), 1,270 mg/L (estimated) Jan. 11, 1979; minimum, 0 mg/L on many days each year. Maximum daily mean (period October 1979 to April 1981), 716 mg/L Oct. 25, 1979; minimum daily mean, 0 mg/L on several days in October and December 1979, Nov. 15-21, 28, Dec. 1, 1980, Jan. 19, 1981.
 SEDIMENT DISCHARGE: Maximum daily (water years 1977-79), 17,790 tons Dec. 15, 1977; minimum daily, 0 tons on many days each year. Maximum daily (period October 1979 to April 1981), 5,570 tons Jan. 13, 1980; minimum daily, 0 tons on several days in October and December 1979, Nov. 15-21, 28, Dec. 1, 1980, Jan. 19, 1981.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 16.5°C July 13; minimum, 0.4°C Feb. 27.

WATER TEMPERATURE, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.7	8.1	8.9	7.9	7.2	7.6	3.0	2.6	2.8	4.9	4.4	4.7
2	9.8	8.5	9.2	7.7	7.1	7.4	3.4	2.5	2.9	5.2	4.6	4.9
3	9.7	8.4	9.1	7.2	6.1	6.6	3.4	3.0	3.2	4.7	4.2	4.5
4	9.4	8.2	8.9	6.3	5.5	6.0	3.4	2.6	2.9	4.6	4.0	4.3
5	9.2	8.0	8.7	6.4	5.6	6.0	3.9	1.1	2.1	4.8	4.1	4.5
6	9.0	7.8	8.5	6.7	5.6	6.2	3.0	1.8	2.1	5.1	4.5	4.8
7	8.7	7.5	8.1	5.6	4.6	5.0	2.8	1.9	2.4	5.2	4.6	4.9
8	8.2	7.3	7.8	4.7	3.9	4.4	3.5	2.4	2.9	5.3	4.6	5.0
9	7.6	6.4	7.0	5.0	4.0	4.5	3.8	3.1	3.4	4.7	4.2	4.5
10	7.0	6.0	6.5	5.7	4.6	5.1	3.2	2.6	2.8	4.4	3.9	4.2
11	7.6	6.7	7.1	6.7	5.5	6.1	3.0	2.6	2.8	4.8	4.0	4.4
12	7.6	6.3	7.0	7.0	6.5	6.8	3.4	2.8	3.1	5.1	4.4	4.7
13	7.8	6.6	7.2	6.9	6.5	6.8	3.5	3.2	3.3	4.6	4.2	4.4
14	7.8	6.6	7.3	7.1	6.5	6.8	3.3	2.5	2.8	4.3	3.6	4.0
15	7.8	6.8	7.4	6.9	6.4	6.7	3.3	2.7	3.0	3.8	2.3	2.9
16	8.1	7.2	7.7	7.1	6.7	6.9	4.2	3.3	3.7	2.5	---	---
17	7.9	7.2	7.6	6.9	5.7	6.4	4.3	3.6	4.1	2.8	2.1	2.5
18	7.2	5.9	6.5	5.7	5.1	5.4	3.9	3.4	3.6	3.1	2.3	2.7
19	6.7	5.6	6.2	6.2	5.3	5.7	3.9	3.4	3.7	3.3	2.6	3.0
20	7.2	6.1	6.6	6.2	5.7	6.0	3.9	3.5	---	3.1	2.1	2.5
21	7.2	6.1	6.7	6.2	5.7	6.0	---	2.8	---	2.8	1.8	2.2
22	7.4	6.8	7.0	5.9	5.4	5.7	---	---	---	2.3	0.5	2.0
23	7.6	6.8	7.2	5.4	4.8	5.1	---	---	---	2.8	1.9	2.3
24	6.8	5.8	6.3	4.9	3.6	4.3	---	---	---	3.1	2.3	2.7
25	6.1	5.1	5.7	3.8	2.8	3.2	---	---	---	3.5	3.1	3.3
26	6.3	5.1	5.7	3.3	2.6	3.0	---	---	---	3.2	2.5	2.8
27	6.4	5.5	5.9	3.3	2.6	3.0	4.2	---	---	2.7	1.6	2.4
28	6.9	6.2	6.5	3.2	1.8	2.2	4.3	3.8	4.0	---	---	---
29	7.3	6.5	6.9	2.4	2.0	2.2	4.6	3.8	4.2	---	---	---
30	7.7	7.1	7.4	3.0	2.2	2.6	4.7	3.9	4.3	---	---	---
31	7.8	7.2	7.5	---	---	---	4.9	4.4	4.6	---	---	---
MONTH	9.8	5.1	7.3	7.9	1.8	5.3	---	---	---	---	---	---

ROGUE RIVER BASIN

14330000 ROGUE RIVER BELOW PROSPECT, OR--Continued

WATER TEMPERATURE, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	3.0	2.2	2.6	4.6	3.5	4.0	7.2	5.4	6.4	8.5	6.3	7.2
2	2.9	0.7	2.4	4.5	3.1	3.7	7.3	5.8	6.6	8.8	7.6	8.2
3	3.8	2.7	3.2	4.9	3.2	4.0	7.3	5.7	6.7	8.7	7.4	8.0
4	3.4	1.2	2.9	5.2	3.5	4.3	7.5	5.7	6.7	8.4	6.8	7.6
5	3.0	2.0	2.7	4.6	3.8	4.2	7.2	5.9	6.6	8.6	7.1	7.8
6	3.7	2.6	3.2	5.4	4.3	4.8	6.8	6.1	6.4	8.3	7.0	7.6
7	3.9	3.2	3.7	5.1	3.6	4.4	7.0	5.4	6.3	7.9	6.4	7.1
8	3.7	2.8	3.2	4.0	2.9	3.4	7.2	5.5	6.5	7.7	6.0	6.8
9	3.8	2.6	3.2	4.1	3.2	3.7	7.2	6.3	6.7	8.2	6.7	7.3
10	---	---	---	4.6	3.7	4.1	7.0	5.8	6.4	7.7	6.6	7.1
11	---	---	---	5.4	4.4	4.9	7.0	6.2	6.6	8.7	6.2	7.3
12	---	---	---	5.4	4.5	5.1	7.4	5.9	6.7	9.8	7.7	8.6
13	4.9	---	---	4.5	3.5	3.8	7.3	6.1	6.5	9.4	7.8	8.9
14	4.4	3.4	3.9	4.7	3.2	3.9	6.6	4.8	5.6	8.9	6.8	7.8
15	4.4	3.2	3.8	4.6	3.9	4.2	5.6	4.6	5.2	9.1	8.2	8.5
16	5.0	3.7	4.3	4.0	2.9	3.4	5.4	4.7	5.0	9.3	7.7	8.4
17	4.8	4.0	4.4	3.8	2.2	2.9	4.9	4.4	4.6	10.5	8.7	9.5
18	5.4	4.3	4.8	4.0	2.7	3.4	6.1	4.5	5.2	9.9	8.8	9.3
19	5.1	4.4	4.8	5.7	3.7	4.6	6.7	5.1	5.9	8.9	7.4	8.3
20	4.8	4.1	4.5	5.7	4.2	5.0	7.1	5.6	6.4	8.1	6.8	7.4
21	5.5	4.6	5.0	5.9	4.6	5.2	7.6	5.9	6.8	7.9	7.0	7.4
22	5.8	4.7	5.2	5.7	4.9	5.4	8.0	6.3	7.2	7.9	6.9	7.3
23	5.6	5.2	5.4	6.0	4.9	5.4	7.9	6.7	7.3	9.2	6.8	7.8
24	5.7	4.8	5.2	6.0	5.0	5.5	7.7	6.2	7.0	11.0	8.4	9.4
25	5.1	0.9	4.3	6.2	4.5	5.4	8.3	6.9	7.6	---	---	---
26	5.4	4.1	4.7	6.4	4.5	5.5	7.8	6.7	7.3	---	---	---
27	5.2	0.4	4.4	6.9	5.1	5.9	7.1	5.8	6.6	---	---	---
28	5.3	1.0	4.3	6.9	5.0	5.9	6.8	5.2	6.0	---	---	---
29	---	---	---	7.0	5.2	6.1	6.7	6.0	6.4	11.2	---	---
30	---	---	---	7.0	5.1	6.1	7.1	6.5	6.7	11.6	10.4	10.9
31	---	---	---	7.2	5.3	6.2	---	---	---	11.2	9.7	10.3
MONTH	---	---	---	7.2	2.2	4.7	8.3	4.4	6.4	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	10.8	9.6	10.2	14.4	11.2	12.7	12.8	11.2	12.0	12.1	9.8	10.9
2	10.5	8.7	9.5	14.7	11.3	12.9	12.3	10.4	11.4	12.3	10.2	11.2
3	10.6	9.1	9.7	14.4	11.4	12.8	11.8	10.3	10.9	11.7	9.8	11.1
4	11.9	9.3	10.4	13.7	10.8	12.2	10.9	9.9	10.3	11.1	9.0	10.2
5	12.8	10.4	11.3	13.7	10.5	12.0	10.3	8.7	9.6	10.0	8.5	9.4
6	12.2	10.3	11.1	14.3	10.9	12.5	10.3	8.1	9.2	9.4	7.9	8.7
7	11.2	9.3	10.1	13.8	11.7	12.8	10.9	8.4	9.6	9.2	7.4	8.4
8	9.3	7.5	8.5	14.0	11.2	12.5	11.3	8.9	10.1	8.9	7.3	8.2
9	9.4	6.7	8.0	14.7	11.2	12.7	12.3	9.4	10.7	9.5	7.4	8.5
10	11.0	7.8	9.1	15.7	12.1	13.7	12.8	10.2	11.4	10.1	8.0	9.1
11	12.3	9.0	10.4	16.3	12.9	14.5	13.3	10.6	11.8	10.6	8.7	9.7
12	13.4	10.0	11.6	16.0	13.5	14.7	13.4	10.9	12.1	11.0	9.1	10.1
13	14.2	11.0	12.4	16.5	13.5	14.7	13.9	11.3	12.6	11.2	9.5	10.4
14	14.4	11.4	12.7	16.0	13.4	14.6	13.4	11.6	12.7	10.9	9.6	10.3
15	14.5	11.4	12.8	15.7	12.9	14.2	13.0	11.3	12.3	10.4	9.3	9.9
16	14.2	11.4	12.7	15.5	12.7	14.0	12.8	10.6	11.8	10.2	8.9	9.7
17	12.6	10.0	11.2	15.3	12.6	13.9	12.2	10.6	11.5	10.0	9.3	9.6
18	11.6	9.5	10.4	15.2	12.6	13.8	11.9	10.0	11.0	10.6	9.2	9.9
19	12.3	9.6	10.8	15.0	12.4	13.7	11.5	9.7	10.7	10.6	8.8	9.8
20	13.4	10.0	11.5	14.8	12.0	13.4	11.1	9.7	10.5	10.3	8.8	9.7
21	13.8	10.8	12.1	14.9	12.1	13.5	11.3	9.1	10.2	10.3	8.7	9.6
22	14.2	11.1	12.4	14.0	12.3	13.1	11.6	9.1	10.3	10.4	8.6	9.6
23	14.3	11.6	12.8	14.6	11.8	13.1	11.6	9.8	10.8	10.3	8.8	9.6
24	14.5	11.2	12.8	14.1	12.0	13.1	12.2	9.9	11.0	10.2	8.7	9.6
25	15.1	11.8	13.2	14.0	11.7	12.9	12.1	10.0	11.1	9.8	8.5	9.3
26	15.2	12.3	13.6	14.1	11.6	12.8	11.9	10.0	11.0	9.4	7.9	8.8
27	14.9	12.6	13.7	13.7	11.6	12.7	12.2	9.9	11.0	9.3	7.9	8.8
28	14.0	12.4	13.2	13.5	11.0	12.2	12.6	10.5	11.5	9.2	7.9	8.6
29	14.2	11.9	12.9	14.0	11.3	12.6	12.8	10.9	11.8	8.7	7.8	8.1
30	14.2	11.6	12.8	13.8	11.9	12.8	12.6	10.8	11.8	8.2	7.3	7.7
31	---	---	---	13.6	11.8	12.7	12.2	9.8	11.1	---	---	---
MONTH	15.2	6.7	11.5	16.5	10.5	13.2	13.9	8.1	11.1	12.3	7.3	9.5

14332000 SOUTH FORK ROGUE RIVER NEAR PROSPECT, OR

LOCATION.--Lat 42°42'30", long 122°23'30", in SE 1/4 SW 1/4 sec.7, T.33 S., R.4 E., Jackson County, Hydrologic Unit 17100307, in Rogue River National Forest, on left bank 0.3 mi downstream from South Fork dam and intake of South Fork power canal, 0.31 mi downstream from Imnaha Creek, 5.6 mi southeast of Prospect, and at mile 10.2.

DRAINAGE AREA.--83.8 mi². Drainage area at site upstream from Imnaha Creek was used October 1931 to September 1949, 61.3 mi²; and Imnaha Creek near Prospect, 22.2 mi².

PERIOD OF RECORD.--April 1924 to September 1931, October 1949 to current year. Equivalent records for period October 1931 to September 1949 may be obtained by combining flow of South Fork Rogue River above Imnaha Creek, near Prospect and Imnaha Creek near Prospect. Records for period October 1949 to September 1983 included flow of South Fork power canal.

REVISED RECORDS.--WSP 1318: 1925(M), 1927(M), 1930(M). WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 3,300 ft above NGVD of 1929, from topographic map. Prior to Sept. 10, 1965, at site 1,000 ft upstream at different datum.

REMARKS.--No estimated daily discharges. Records fair. All records given herein do not include flow in South Fork power canal (completed in March 1932) which diverts 1,500 ft upstream from station and returns water to main stem Rogue River upstream from South Fork Rogue River; practically no storage upstream from diversion dam.

AVERAGE DISCHARGE.--59 years (water years 1925-83), 178 ft³/s, 129,000 acre-ft/yr (includes flow of South Fork power canal). 19 years (water years 1984-2002), 76.9 ft³/s, 55,680 acre-ft/yr (river only).

EXTREMES FOR PERIOD OF RECORD.--River only, maximum discharge, 7,010 ft³/s Dec. 22, 1964, gage height, 11.1 ft, from floodmark, from rating curve extended above 410 ft³/s on basis of measurement of flow over dam of 3,180 ft³/s; no flow Jan. 31, 1950, Sept. 29, 30, 1967 (entire flow diverted to canal).

Combined flow, maximum discharge, 7,010 ft³/s Dec. 22, 1964 (no flow in canal); minimum daily, about 38 ft³/s Aug. 1-31, 1931.

EXTREMES FOR CURRENT YEAR.--River only, maximum discharge, 1,400 ft³/s Apr. 14, gage height, 5.09 ft; minimum discharge, 9.4 ft³/s Oct. 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	12	12	15	18	75	68	102	118	12	14	17
2	12	12	12	53	16	65	86	114	93	12	16	17
3	12	12	12	64	15	56	106	129	76	12	18	16
4	12	12	12	34	15	50	130	123	66	12	18	16
5	12	12	13	21	16	47	183	126	66	16	18	16
6	12	13	13	92	15	49	207	129	62	18	18	16
7	12	12	12	115	25	63	196	115	50	17	17	17
8	12	12	12	191	24	47	178	93	37	16	16	15
9	12	12	12	166	20	42	209	84	30	15	16	15
10	12	12	12	101	19	38	339	73	24	14	15	15
11	12	12	12	68	18	40	316	58	21	14	15	16
12	11	13	12	57	18	72	310	65	18	14	14	15
13	12	13	16	46	18	64	354	93	16	13	14	15
14	12	13	50	35	17	52	1090	95	15	13	16	15
15	12	12	14	27	17	47	717	96	14	14	18	14
16	12	14	14	21	18	43	442	90	13	15	18	14
17	12	12	14	20	19	38	328	102	13	14	17	19
18	12	12	13	18	19	33	252	119	23	15	17	17
19	12	13	14	18	26	31	205	111	16	15	17	12
20	12	13	13	15	74	30	178	86	13	15	17	12
21	12	14	13	16	85	29	156	77	13	15	17	12
22	13	13	13	20	81	30	142	64	13	16	17	12
23	13	12	12	23	130	34	139	51	13	16	16	12
24	12	12	12	21	169	38	133	54	12	15	16	12
25	13	12	12	23	131	38	132	74	12	15	16	12
26	13	12	12	24	111	36	144	91	12	16	15	12
27	12	12	13	19	98	34	134	109	12	16	15	12
28	12	13	13	19	88	37	117	134	12	15	41	11
29	12	12	13	30	---	43	88	150	12	15	57	12
30	13	12	13	20	---	50	99	160	12	15	34	12
31	12	---	14	19	---	58	---	133	---	14	18	---
TOTAL	376	372	434	1411	1320	1409	7178	3100	907	454	591	428
MEAN	12.1	12.4	14.0	45.5	47.1	45.5	239	100	30.2	14.6	19.1	14.3
MAX	13	14	50	191	169	75	1090	160	118	18	57	19
MIN	11	12	12	15	15	29	68	51	12	12	14	11
AC-FT	746	738	861	2800	2620	2790	14240	6150	1800	901	1170	849

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2002, BY WATER YEAR (WY)

	23.6	40.7	89.3	92.9	91.9	102	143	166	102	26.8	18.9	26.1
MEAN	23.6	40.7	89.3	92.9	91.9	102	143	166	102	26.8	18.9	26.1
MAX	116	161	526	435	323	238	345	347	301	155	121	115
(WY)	1998	1997	1997	1997	1996	1993	1989	1997	1984	1997	1997	1997
MIN	1.85	5.38	3.80	2.87	3.42	9.91	19.9	12.8	5.23	5.30	4.11	1.16
(WY)	1984	1986	1987	1985	1985	1985	1988	1992	1987	1988	1986	1984

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1984 - 2002

ANNUAL TOTAL	9111	17980	
ANNUAL MEAN	25.0	49.3	
HIGHEST ANNUAL MEAN			76.9
LOWEST ANNUAL MEAN			224
HIGHEST DAILY MEAN	452	May 16	1090
LOWEST DAILY MEAN	11	Aug 26	11
ANNUAL SEVEN-DAY MINIMUM	12	Aug 21	12
ANNUAL RUNOFF (AC-FT)	18070		35660
10 PERCENT EXCEEDS	47		124
50 PERCENT EXCEEDS	14		16
90 PERCENT EXCEEDS	12		12
			55680
			208
			18
			4.6

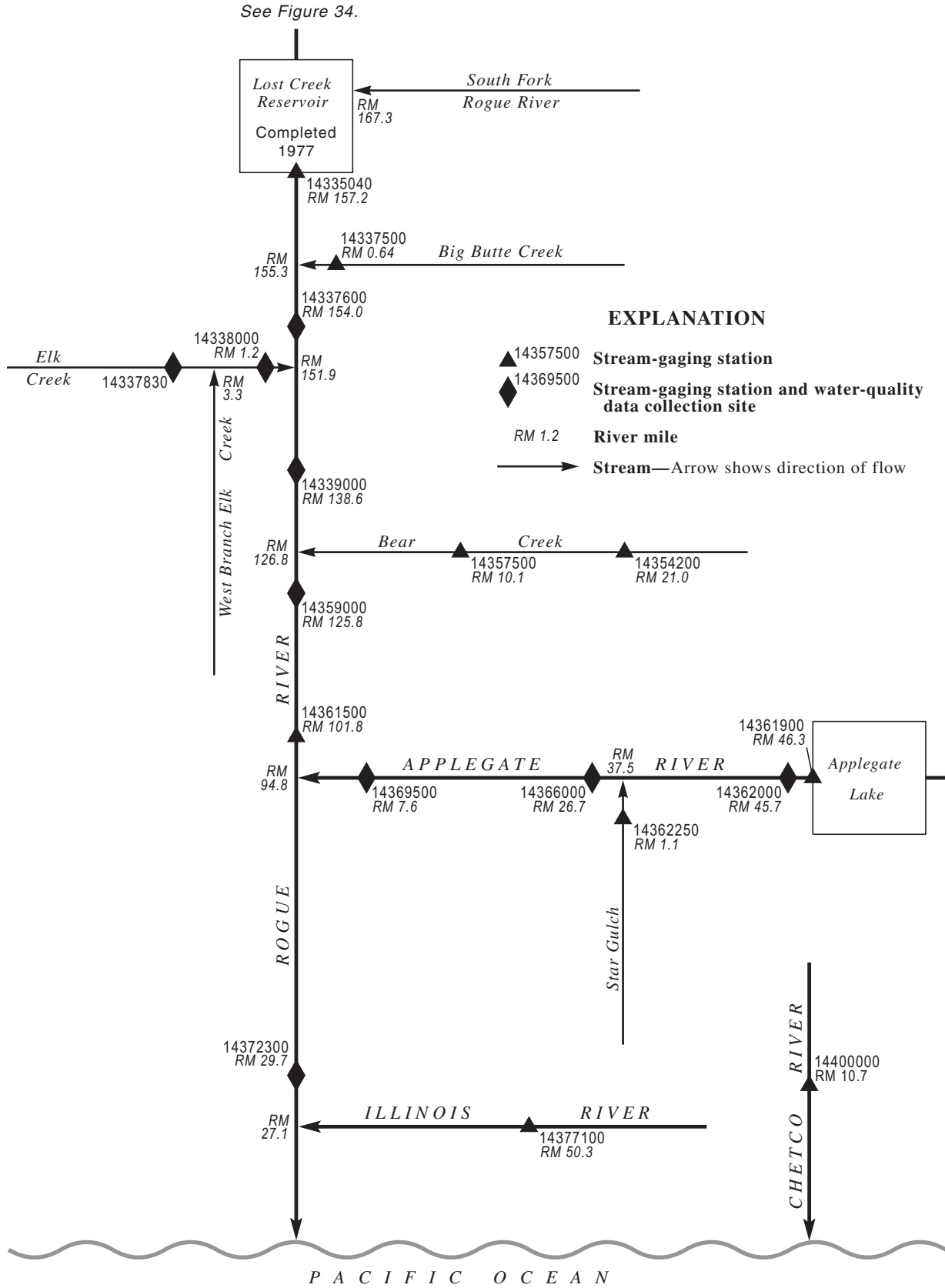


Figure 35. Schematic diagram showing surface-water and water-quality stations in the Rogue River Basin, downstream from Lost Creek Reservoir.

14335040 LOST CREEK LAKE NEAR MCLEOD, OR

LOCATION.--Lat 42°40'16", long 122°40'25", in SW 1/4 sec.26, T.33 S., R. 1 E., Jackson County, Hydrologic Unit 17100307, in outlet structure of Lost Creek Dam on Rogue River, 1.0 mi northeast of McLeod and at mile 157.2.

DRAINAGE AREA.--686 mi².

PERIOD OF RECORD.--February 1977 to current year.

REVISED RECORDS.--WDR OR-85-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (levels by Corps of Engineers). Prior to Nov. 28, 1977, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed by earthfill dam completed in October 1976. Storage began in February 1977. Total capacity, 465,000 acre-ft between elevations 1,551.0 ft and 1,872.0 ft, maximum pool elevation. Elevation of gated spillway crest, 1,823.0 ft. Usable storage, 315,000 acre-ft between elevation 1,751.0 ft and 1,872.0 ft. Water is used for flood control, recreation, power generation, pollution abatement, domestic use and other purposes.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 466,500 acre-ft May 22, 2000, elevation, 1,872.43 ft; minimum contents since first filling, 100,800 acre-ft Oct. 29, 1977, elevation, 1,720.50 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 465,000 acre-ft May 18, elevation, 1,871.99 ft; minimum contents, 198,400 acre-ft Oct. 10, 11, elevation, 1,775.63 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)

1,720	100,100	1,850	393,100
1,750	148,200	1,872	465,000
1,800	254,600	1,899	562,900

ELEVATION, in FT (NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1776.26	1776.75	1782.61	1804.27	1823.70	1845.58	1862.11	1871.88	1871.16	1855.00	1843.33	1822.88
2	1776.18	1776.80	1782.98	1806.04	1824.08	1846.36	1862.49	1871.90	1870.88	1854.72	1842.86	1822.12
3	1776.11	1776.83	1783.28	1807.82	1824.43	1847.09	1862.87	1871.92	1870.34	1854.43	1842.38	1821.37
4	1776.01	1776.86	1783.55	1809.13	1824.78	1847.77	1863.19	1871.92	1869.75	1854.13	1841.92	1820.62
5	1775.92	1776.88	1783.94	1810.22	1825.11	1848.47	1863.42	1871.92	1869.15	1853.83	1841.45	1819.83
6	1775.85	1776.90	1784.82	1811.86	1825.43	1849.21	1863.81	1871.92	1868.55	1853.52	1840.97	1819.03
7	1775.77	1776.80	1785.68	1813.74	1826.12	1850.11	1864.15	1871.91	1867.89	1853.21	1840.32	1818.23
8	1775.70	1776.92	1786.19	1816.12	1826.98	1850.88	1864.45	1871.91	1867.14	1852.89	1839.66	1817.42
9	1775.64	1776.92	1786.58	1818.15	1827.66	1851.60	1864.85	1871.92	1866.36	1852.56	1838.99	1816.60
10	1775.63	1776.93	1786.95	1818.94	1828.27	1852.27	1865.35	1871.91	1865.54	1852.23	1838.35	1815.80
11	1775.74	1776.94	1787.29	1819.03	1828.83	1852.96	1865.67	1871.92	1864.70	1851.91	1837.70	1814.98
12	1775.80	1777.00	1787.60	1819.04	1829.35	1853.94	1865.93	1871.95	1863.88	1851.56	1837.03	1814.17
13	1775.82	1777.07	1788.45	1819.04	1829.86	1854.90	1866.34	1871.98	1863.04	1851.22	1836.38	1813.44
14	1775.84	1777.23	1790.44	1819.02	1830.35	1855.76	1868.74	1871.97	1862.21	1850.85	1835.72	1812.80
15	1775.85	1777.31	1791.47	1818.93	1830.88	1856.55	1869.01	1871.96	1861.41	1850.47	1835.05	1812.23
16	1775.87	1777.55	1792.48	1818.82	1831.38	1857.28	1868.10	1871.92	1860.65	1850.09	1834.37	1811.71
17	1775.87	1777.78	1793.91	1818.76	1831.92	1857.91	1867.40	1871.94	1859.97	1849.70	1833.71	1811.31
18	1775.88	1777.88	1795.02	1818.80	1832.45	1858.30	1867.00	1871.98	1859.61	1849.30	1833.04	1811.03
19	1775.88	1777.98	1795.93	1819.05	1833.18	1858.55	1867.16	1871.95	1859.13	1848.90	1832.35	1810.76
20	1775.88	1778.16	1796.76	1819.41	1834.40	1858.64	1867.81	1871.93	1858.62	1848.49	1831.68	1810.57
21	1775.88	1778.56	1797.48	1819.88	1835.79	1858.74	1868.41	1871.94	1858.14	1848.09	1830.97	1810.43
22	1775.92	1779.53	1798.11	1820.17	1837.12	1858.98	1868.99	1871.89	1857.69	1847.67	1830.25	1810.37
23	1776.24	1780.01	1798.64	1820.48	1838.69	1859.44	1869.56	1871.80	1857.27	1847.26	1829.52	1810.31
24	1776.31	1780.40	1799.10	1820.80	1840.29	1860.02	1870.00	1871.71	1856.88	1846.85	1828.79	1810.24
25	1776.33	1780.71	1799.51	1821.31	1841.59	1860.38	1870.28	1871.66	1856.54	1846.43	1828.07	1810.20
26	1776.36	1780.94	1799.90	1821.82	1842.73	1860.55	1870.61	1871.65	1856.25	1845.99	1827.34	1810.16
27	1776.37	1781.10	1800.30	1822.12	1843.76	1860.62	1870.95	1871.51	1855.98	1845.55	1826.61	1810.11
28	1776.40	1781.56	1800.73	1822.34	1844.71	1860.70	1871.21	1871.48	1855.75	1845.10	1825.88	1810.06
29	1776.42	1781.92	1801.27	1822.51	---	1861.03	1871.44	1871.50	1855.52	1844.68	1825.13	1810.02
30	1776.52	1782.15	1801.91	1822.87	---	1861.39	1871.68	1871.47	1855.27	1844.22	1824.38	1809.98
31	1776.68	---	1803.04	1823.28	---	1861.75	---	1871.34	---	1843.78	1823.63	---
MAX	1776.68	1782.15	1803.04	1823.28	1844.71	1861.75	1871.68	1871.98	1871.16	1855.00	1843.33	1822.88
MIN	1775.63	1776.75	1782.61	1804.27	1823.70	1845.58	1862.11	1871.34	1855.27	1843.78	1823.63	1809.98
(†)	200600	212600	262100	315100	376900	430600	463900	462700	409700	374100	316100	279800
(‡)	+300	+12000	+49500	+53000	+61800	+53700	+33300	-1200	-53000	-35600	-58000	-36300

CAL YR 2001 MAX 1856.42 MIN 1775.63 AC-FT† -21300
WTR YR 2002 MAX 1871.98 MIN 1775.63 AC-FT‡ +79500

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

14337600 ROGUE RIVER NEAR MCLEOD, OR

LOCATION.--Lat 42°39'20", long 122°42'50", in SW 1/4 sec.33, T.33 S., R.1 E., Jackson County, Hydrologic Unit 17100307, on left bank at Obstinate J Ranch, 1.3 mi downstream from Big Butte Creek, 1.6 mi southwest of McLeod, and at mile 154.0.

DRAINAGE AREA.--938 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,489.08 ft above NGVD of 1929.

REMARKS.--Records good. Flow regulated since February 1977 by Lost Creek Lake (station 14335040). Diversions for irrigation upstream from station; most of low flow of Big Butte Creek is diverted near Butte Falls.

AVERAGE DISCHARGE.--12 years (water years 1966-77), 2,176 ft³/s, 1,577,000 acre-ft/yr.
25 years (water years 1978-2002), 2,060 ft³/s, 1,493,000 acre-ft/yr, regulated period.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,000 ft³/s Mar. 3, 1972, gage height, 12.24 ft; minimum discharge, 468 ft³/s Feb. 18, 1977, result of closure of Lost Creek Dam.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1928, 20.35 ft Dec. 22, 1964, from floodmarks, discharge, 74,300 ft³/s, from slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,650 ft³/s Apr. 15, gage height, 5.43 ft; minimum discharge, 760 ft³/s Mar. 11.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1020	822	1040	e1000	913	826	1830	1940	2660	1660	1670	1860
2	e980	819	972	e1150	905	836	2010	2420	2680	1660	1640	1860
3	e940	814	936	e1100	902	807	2330	2490	3020	1650	1660	1850
4	e960	814	893	e1000	899	812	2680	2470	3070	1660	1660	1860
5	e960	813	1210	e1000	898	804	3120	2430	3060	1650	1670	1880
6	957	815	1190	e1500	895	810	2810	2390	3020	1630	1690	1950
7	952	816	959	e1300	934	908	2670	2300	3030	1650	1950	1950
8	948	818	898	e1800	992	851	2560	2170	3070	1670	1930	1950
9	931	818	891	e1700	926	833	2510	2100	3060	1660	1940	1970
10	880	819	876	e2100	913	838	2920	2090	3070	1620	1930	1940
11	888	818	896	e2500	900	854	3200	1960	3030	1600	1940	1920
12	870	825	936	e2450	e900	821	3370	1990	3010	1600	1940	1930
13	e840	816	1170	e2350	e900	797	3370	2120	3010	e1610	1930	1810
14	e830	819	1750	e2250	e900	804	4330	2170	3020	e1620	1930	1660
15	e840	814	1000	e2150	e900	802	6000	2200	2930	e1630	1920	1540
16	e840	821	922	2040	e900	832	6290	2180	2820	1630	1910	1490
17	e840	828	1050	1880	e900	975	5370	2110	2740	1620	1910	1430
18	e830	816	1000	1620	910	1200	4230	2210	2600	1640	1850	1350
19	e820	811	1010	1320	933	1410	2770	2300	2480	1640	1870	1220
20	812	820	983	1150	1150	1650	1760	2170	2410	1640	1860	1120
21	818	837	882	1480	1090	1650	1810	2130	2300	1640	1870	1020
22	826	885	831	1410	983	1520	1710	2120	2200	1640	1900	931
23	839	841	833	1210	1060	1410	1620	2050	2130	1630	1890	929
24	832	851	809	1130	990	1560	1790	2060	2040	1630	1890	930
25	e830	876	801	1040	945	1790	2050	2060	1930	1630	1890	918
26	826	859	791	1270	911	2020	2050	2100	1800	1640	1890	912
27	829	834	789	1310	879	2140	1970	2460	1730	1630	1880	927
28	824	1040	790	1280	855	2050	1890	2460	1640	1670	1870	930
29	823	1050	e850	1210	---	1650	1890	2480	1620	1660	1870	970
30	825	889	e950	1010	---	1630	1910	2680	1630	1640	1890	993
31	824	---	e1050	898	---	1720	---	2670	---	1660	1880	---
TOTAL	27034	25318	29958	46608	26183	37610	84820	69480	76810	50810	57520	44000
MEAN	872	844	966	1503	935	1213	2827	2241	2560	1639	1855	1467
MAX	1020	1050	1750	2500	1150	2140	6290	2680	3070	1670	1950	1970
MIN	812	811	789	898	855	797	1620	1940	1620	1600	1640	912
AC-FT	53620	50220	59420	92450	51930	74600	168200	137800	152400	100800	114100	87270

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2002, BY WATER YEAR (WY)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	1249	1652	2269	2181	1733	2035	2364	2750	2474	2152	2152	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
MAX	1905	3544	6464	7584	4131	3557	3821	4024	3755	3447	2921	2195	2195	2195	2195	2195	2195	2195	2195	2195	2195	2195	2195	2195	2195
(WY)	1984	1985	1997	1997	1996	1986	1989	1996	1984	1999	1984	1983	1983	1983	1983	1983	1983	1983	1983	1983	1983	1983	1983	1983	1983
MIN	872	844	964	1038	842	820	823	1578	1492	1123	1761	1290	1290	1290	1290	1290	1290	1290	1290	1290	1290	1290	1290	1290	
(WY)	2002	2002	1993	2001	2001	2001	2001	1992	2001	1992	1994	1980	1980	1980	1980	1980	1980	1980	1980	1980	1980	1980	1980	1980	1980

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1978 - 2002

ANNUAL TOTAL	452130	576151	
ANNUAL MEAN	1239	1578	2060
HIGHEST ANNUAL MEAN			3224
LOWEST ANNUAL MEAN			1314
HIGHEST DAILY MEAN	3310	6290	16500
LOWEST DAILY MEAN	730	789	730
ANNUAL SEVEN-DAY MINIMUM	799	806	734
ANNUAL RUNOFF (AC-FT)	896800	1143000	1493000
10 PERCENT EXCEEDS	1880	2500	3290
50 PERCENT EXCEEDS	1000	1620	1860
90 PERCENT EXCEEDS	813	824	998

e Estimated

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: August 1970 to current year.

INSTRUMENTATION.--Temperature recorder since August 1970.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 18.0°C July 17, 18, Aug. 7, 1973; minimum, 0.5°C Jan. 3-5, 14, 15, 1971. Maximum since full operation of Lost Creek Lake, 16.5°C Sept. 14, 1999, but may have been higher during period of missing record Sept. 21-30; minimum, 2.5°C Jan. 10, 1999.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 14.7°C Sept. 15; minimum, 4.3°C Feb. 9, Mar. 1, 2.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	7.1	6.4	6.7	7.5	7.0	7.3	---	---	---
2	---	---	---	7.3	6.2	6.6	7.4	6.8	7.1	---	---	---
3	---	---	---	7.2	5.9	6.4	7.4	6.9	7.1	---	---	---
4	---	---	---	7.3	5.9	6.4	7.2	6.9	7.0	---	---	---
5	9.6	8.0	8.6	7.0	6.2	6.5	7.0	5.7	6.1	---	---	---
6	8.7	6.7	7.8	7.3	6.1	6.6	7.1	5.5	6.5	---	---	---
7	7.9	6.4	6.9	7.0	5.7	6.2	7.1	6.5	6.7	---	---	---
8	7.9	6.3	6.9	7.2	5.7	6.3	7.1	6.3	6.7	---	---	---
9	7.6	6.1	6.7	7.2	5.9	6.4	7.0	6.3	6.7	---	---	---
10	7.5	6.1	6.6	7.4	6.1	6.6	6.6	6.0	6.3	---	---	---
11	7.8	6.5	7.1	7.6	6.7	7.0	6.8	6.3	6.5	---	---	---
12	7.9	6.0	6.7	7.4	6.9	7.1	6.6	6.2	6.4	---	---	---
13	---	6.3	---	7.1	6.8	6.9	6.6	6.2	6.4	---	---	---
14	---	---	---	7.6	6.9	7.1	6.2	5.7	5.9	---	---	---
15	---	---	---	7.3	6.9	7.1	6.2	5.7	6.0	---	---	---
16	7.2	---	---	7.5	7.1	7.2	6.8	6.1	6.5	6.0	5.5	5.7
17	---	6.0	---	7.6	6.9	7.2	6.7	6.0	6.5	6.0	5.4	5.7
18	---	---	---	7.6	6.8	7.1	6.1	5.7	5.9	6.1	5.5	5.7
19	7.4	---	---	7.9	7.1	7.4	6.1	5.7	5.9	6.0	5.5	5.7
20	7.5	6.0	6.5	7.6	7.1	7.5	6.4	5.8	6.1	5.8	5.3	5.6
21	7.3	5.7	6.3	7.6	7.2	7.5	6.2	5.6	5.9	5.6	5.1	5.4
22	6.6	6.2	6.4	7.9	7.5	7.7	6.5	5.5	5.9	5.6	5.0	5.2
23	7.0	6.0	6.4	8.0	7.2	7.7	6.3	5.5	5.9	5.8	5.2	5.4
24	6.9	5.7	6.1	7.7	7.1	7.4	5.9	5.1	5.4	5.8	5.1	5.4
25	7.2	5.6	6.1	7.7	7.1	7.4	6.2	5.3	5.7	5.7	5.3	5.5
26	7.2	5.7	6.3	7.9	7.3	7.5	6.2	5.6	5.8	5.7	5.1	5.4
27	6.9	5.8	6.3	7.8	7.1	7.4	6.2	5.6	5.9	5.5	4.9	5.1
28	7.1	6.2	6.5	7.5	6.1	6.8	6.3	5.6	5.9	5.6	4.7	5.0
29	7.0	6.2	6.5	7.6	6.2	7.0	---	5.8	---	5.5	4.6	5.0
30	6.9	6.5	6.6	7.8	7.1	7.3	---	---	---	5.5	4.6	4.9
31	7.4	6.4	6.7	---	---	---	---	---	---	5.4	4.4	4.9
MONTH	---	---	---	8.0	5.7	7.0	---	---	---	---	---	---

ROGUE RIVER BASIN

143376600 ROGUE RIVER NEAR MCLEOD, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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

14337830 ELK CREEK BELOW ALCO CREEK, NEAR TRAIL, OR

LOCATION.--Lat 42°40'46", long 122°42'37", in NW 1/4 sec.4, T.33 S., R.1 E., Jackson County, Hydrologic Unit 17100307, on Corps of Engineers' Land, on right bank 500 ft downstream from Alco Creek, and 7.5 mi northeast of Trail.

DRAINAGE AREA.--111 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1986 to current year (operated as a low-flow station only).

GAGE.--Water-stage recorder. Elevation of gage is 1,680 ft above NGVD of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. No regulation. Some diversions upstream from station for irrigation. Operated as a low-flow station only. Discharges above 440 ft³/s not published. U.S. Geological Survey satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Minimum discharge recorded, 0.54 ft³/s Sept. 23, 1992, but may have been less during period of estimated discharge during that year.

EXTREMES FOR CURRENT YEAR.--Minimum discharge, 1.3 ft³/s Aug. 16-18.DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	10	---	---	154	195	186	98	30	7.2	2.4	2.6
2	2.8	8.2	---	---	138	169	208	90	29	6.7	2.6	2.5
3	2.6	7.1	277	---	132	149	206	86	27	5.6	2.6	2.1
4	2.5	6.5	159	---	141	136	220	84	25	5.2	2.6	2.2
5	2.3	6.5	151	---	149	131	220	80	24	5.5	2.9	2.7
6	2.3	6.7	---	---	161	143	200	73	23	5.2	2.7	2.8
7	2.4	6.7	---	---	---	172	174	67	22	4.9	2.8	5.6
8	2.6	6.7	248	---	---	158	163	63	21	4.5	2.8	5.9
9	2.7	6.8	232	---	---	149	153	60	22	4.4	2.8	5.1
10	2.9	6.8	174	---	---	139	159	57	20	4.0	2.5	4.1
11	4.0	7.0	130	374	369	156	154	55	19	3.5	2.6	3.5
12	6.3	8.3	123	339	317	297	153	54	18	3.4	2.6	2.7
13	4.2	13	---	289	309	320	164	53	17	3.3	2.3	3.1
14	3.5	17	---	242	300	301	---	52	15	3.6	2.1	2.9
15	3.4	15	---	189	263	281	291	50	14	3.6	1.7	2.6
16	3.3	23	---	156	242	246	230	48	14	3.4	1.4	2.6
17	3.4	30	---	140	250	215	243	47	14	2.8	1.4	3.1
18	3.4	18	---	118	225	199	281	47	19	2.7	1.4	14
19	3.3	13	---	112	---	187	266	45	17	2.4	1.7	9.0
20	3.4	15	---	107	---	226	226	44	15	2.5	1.9	6.5
21	3.4	38	---	270	---	362	204	46	14	2.7	2.0	6.1
22	3.9	154	304	277	---	---	182	49	14	2.4	2.6	5.6
23	13	80	239	209	---	---	164	42	12	2.2	2.8	4.9
24	11	56	198	180	---	---	145	38	11	2.0	2.9	3.7
25	7.6	74	171	---	---	---	136	36	9.9	1.8	2.6	3.7
26	6.0	71	166	---	330	353	126	35	8.8	2.0	2.4	3.2
27	5.4	49	214	---	273	292	117	35	8.2	1.9	2.6	3.5
28	5.5	---	397	364	231	232	103	38	7.8	2.1	2.7	3.6
29	5.7	270	---	259	---	210	104	37	8.0	2.6	2.3	3.2
30	7.0	146	---	194	---	195	101	34	7.9	2.6	2.2	3.7
31	11	---	---	163	---	187	---	31	---	2.1	2.3	---
TOTAL	144.0	---	---	---	---	---	---	1674	506.6	108.8	73.2	126.8
MEAN	4.65	---	---	---	---	---	---	54.0	16.9	3.51	2.36	4.23
MAX	13	---	---	---	---	---	---	98	30	7.2	2.9	14
MIN	2.3	---	---	---	---	---	---	31	7.8	1.8	1.4	2.1
AC-FT	286	---	---	---	---	---	---	3320	1000	216	145	252
CFSM	0.04	---	---	---	---	---	---	0.49	0.15	0.03	0.02	0.04
IN.	0.05	---	---	---	---	---	---	0.56	0.17	0.04	0.02	0.04

14337830 ELK CREEK BELOW ALCO CREEK, NEAR TRAIL, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
 WATER TEMPERATURE: April 1986 to current year.
 TURBIDITY: October 2000 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Water temperature records good. Available turbidity records fair. Turbidity values are considered relative to this site. The probe was checked using a polymer bead standard.

EXTREMES FOR PERIOD OF DAILY RECORD.--
 WATER TEMPERATURE: Maximum recorded, 31.5°C June 22, 1992, but may have been higher during period of missing record in August 1992; minimum, 0.0°C at times during most winter periods.
 TURBIDITY: Maximum, >100 NTU many days during 2002 water year; minimum, <1 NTU many days most years.

EXTREMES FOR CURRENT YEAR.--
 WATER TEMPERATURE: Maximum, 30.9°C July 13; minimum, 1.9°C Jan. 16.
 TURBIDITY: Maximum recorded, >100 NTU many days during the year; minimum, <1 many days during the year.

WATER TEMPERATURE, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	20.2	13.0	16.3	12.2	10.3	11.3	6.2	5.6	5.9	7.1	6.4	6.8
2	20.4	13.6	16.8	13.3	9.9	11.1	6.9	5.9	6.4	7.4	6.5	7.0
3	19.7	13.3	16.4	12.0	7.7	9.6	6.5	5.6	6.1	7.0	6.0	6.5
4	19.5	13.0	16.1	11.4	6.8	8.9	5.6	4.9	5.3	6.2	5.3	5.8
5	18.4	13.0	15.7	10.8	8.1	9.2	5.0	2.6	3.7	6.9	5.8	6.3
6	17.9	12.7	15.2	10.9	7.5	9.4	5.6	4.4	5.1	7.4	6.7	7.0
7	15.4	11.7	13.9	8.8	5.0	6.9	6.0	5.2	5.5	7.5	6.8	7.2
8	15.8	11.4	13.4	8.3	4.0	6.1	5.9	4.6	5.3	7.5	6.6	7.2
9	14.6	9.3	11.9	8.1	4.4	6.2	5.7	4.7	5.3	6.8	5.8	6.3
10	12.6	9.2	11.2	9.6	5.1	7.2	4.7	3.6	4.0	6.3	5.2	5.8
11	14.5	11.3	12.6	10.8	7.9	9.2	4.9	4.0	4.4	6.6	5.2	5.9
12	14.3	8.9	11.4	10.8	9.9	10.3	4.8	4.0	4.4	7.0	5.7	6.2
13	15.8	9.7	12.4	9.9	9.3	9.6	5.3	4.6	4.9	5.8	4.7	5.3
14	15.5	9.7	12.4	10.7	9.2	9.9	6.2	5.3	5.9	5.3	4.2	4.7
15	15.0	10.2	12.5	10.1	8.8	9.6	5.8	5.4	5.6	4.2	2.8	3.4
16	14.3	11.1	12.6	10.2	9.1	9.8	6.4	5.4	5.8	3.3	1.9	2.7
17	14.2	9.9	12.0	9.4	6.9	8.3	6.9	6.0	6.4	3.6	2.5	3.1
18	12.8	7.9	10.5	8.4	6.0	7.0	6.1	5.5	5.8	4.1	2.9	3.4
19	13.1	7.9	10.6	9.4	7.2	8.2	6.2	5.5	5.7	4.0	2.5	3.2
20	14.3	9.4	11.8	8.6	7.8	8.1	6.1	5.3	5.8	3.4	2.4	2.8
21	12.6	8.9	11.1	8.1	7.6	7.8	5.6	5.0	5.2	3.9	2.9	3.4
22	11.8	10.8	11.3	8.3	7.5	7.8	5.9	4.7	5.3	4.4	3.8	4.0
23	12.4	9.1	10.8	8.1	7.1	7.6	5.5	4.2	4.9	4.9	3.8	4.2
24	10.7	7.1	8.7	7.4	5.3	6.4	4.2	3.3	3.9	4.4	3.2	3.8
25	11.1	6.2	8.3	6.1	5.2	5.7	4.9	3.8	4.3	4.7	4.0	4.4
26	11.8	6.6	8.9	6.9	5.7	6.1	5.3	4.2	4.7	5.8	4.7	5.3
27	10.0	7.2	8.6	5.7	4.1	4.9	6.0	4.5	5.2	5.2	4.2	4.7
28	10.8	8.8	9.7	4.9	2.8	3.5	6.1	5.0	5.6	4.4	3.3	3.8
29	11.3	9.3	10.2	6.1	4.4	5.4	6.8	5.5	6.1	3.4	2.0	2.8
30	11.4	10.4	10.8	6.4	5.4	5.8	6.8	5.7	6.2	3.8	2.0	2.9
31	12.0	10.1	11.0	---	---	---	7.1	6.4	6.7	3.6	2.0	2.9
MONTH	20.4	6.2	12.1	13.3	2.8	7.9	7.1	2.6	5.3	7.5	1.9	4.8
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	5.0	3.4	4.0	5.5	2.6	4.0	10.6	5.3	7.9	12.3	7.5	9.6
2	4.1	2.4	3.3	5.9	2.4	4.1	11.2	6.0	8.5	13.1	7.7	10.5
3	5.3	3.2	4.0	6.3	2.6	4.5	11.4	6.3	8.8	13.3	8.5	10.9
4	4.0	2.0	3.1	6.9	3.2	5.0	11.7	6.4	8.9	13.0	7.3	10.3
5	3.8	2.1	2.9	5.5	3.5	4.6	10.1	7.3	8.7	13.2	8.1	10.7
6	5.1	3.0	4.0	7.0	5.3	6.1	9.7	7.4	8.3	12.5	8.1	10.2
7	5.2	4.3	4.8	6.3	3.3	5.0	10.9	6.0	8.0	11.8	6.6	9.3
8	6.3	5.0	5.5	4.9	2.4	3.5	10.6	5.8	8.3	11.9	5.9	9.0
9	6.1	4.4	5.1	5.0	2.8	4.0	9.6	7.8	8.7	10.9	7.2	9.0
10	6.4	4.4	5.2	5.7	3.7	4.8	10.5	7.2	8.7	11.9	6.5	9.0
11	6.3	4.3	5.2	6.6	5.2	5.8	10.5	7.9	8.9	13.4	6.8	10.1
12	6.4	3.9	5.1	6.5	4.9	5.9	12.0	7.6	9.6	15.2	8.9	12.0
13	6.9	4.8	5.6	4.9	4.0	4.4	10.0	8.4	9.0	13.7	10.9	12.2
14	6.2	3.8	4.9	5.8	3.8	4.6	9.2	7.0	8.5	14.4	8.2	11.2
15	6.5	3.6	5.0	5.6	3.8	4.6	7.7	5.4	6.4	13.8	9.4	11.7
16	7.0	4.7	5.9	4.3	3.6	3.9	6.5	5.0	5.7	14.9	8.7	11.8
17	6.1	4.6	5.4	5.3	2.8	4.0	6.3	4.9	5.4	16.9	11.3	13.8
18	6.8	5.2	5.9	5.4	3.0	4.2	8.4	4.7	6.2	15.2	11.7	13.5
19	6.4	5.8	6.1	7.8	4.1	5.7	9.6	4.6	6.9	13.0	10.8	11.8
20	7.0	5.8	6.3	7.3	3.7	5.5	10.1	5.0	7.3	12.6	9.2	10.8
21	7.4	6.3	6.8	7.8	4.8	6.2	10.8	5.2	7.8	12.9	9.9	11.1
22	8.1	6.0	6.9	7.4	5.3	6.3	11.6	5.9	8.6	13.1	8.5	10.7
23	7.1	6.5	6.8	7.3	5.6	6.4	11.5	6.5	9.0	15.1	8.2	11.5
24	7.3	5.4	6.3	8.1	5.7	6.5	11.7	5.6	8.7	16.9	10.2	13.4
25	6.8	4.2	5.4	8.2	4.4	6.1	12.4	7.0	9.7	16.6	12.3	14.6
26	7.5	4.4	5.8	8.7	4.6	6.6	11.0	7.0	9.2	18.3	13.0	15.6
27	7.1	4.1	5.6	8.8	4.8	6.7	9.4	7.1	8.2	16.3	14.5	15.2
28	6.3	3.9	5.1	9.2	4.7	6.8	9.9	5.3	7.7	16.0	13.4	14.7
29	---	---	---	9.8	4.9	7.3	9.5	6.5	8.3	20.0	14.0	16.6
30	---	---	---	10.0	4.9	7.3	9.2	8.3	8.7	20.6	15.1	17.4
31	---	---	---	10.0	4.9	7.4	---	---	---	19.9	14.0	16.8
MONTH	8.1	2.0	5.2	10.0	2.4	5.4	12.4	4.6	8.2	20.6	5.9	12.1

14337830 ELK CREEK BELOW ALCO CREEK, NEAR TRAIL, OR--Continued

TURBIDITY (NTU), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
FEBRUARY												
1	10	6	8	>100	>100	>100	4	2	4	---	---	---
2	8	5	6	>100	>100	>100	4	3	3	---	---	---
3	6	5	6	>100	15	52	5	3	4	---	---	---
4	6	4	5	---	---	---	4	3	4	---	---	---
5	5	4	5	---	---	---	4	3	4	---	---	---
6	5	4	4	---	---	---	4	4	4	---	---	---
7	57	3	7	---	---	---	4	2	4	2	<1	<1
8	38	21	24	20	11	15	4	3	4	1	<1	<1
9	21	19	20	13	8	11	4	3	4	2	<1	1
10	21	17	20	8	6	8	4	3	4	2	<1	<1
11	20	17	19	6	4	5	4	3	4	3	<1	<1
12	19	16	18	6	3	4	4	2	4	---	---	---
13	17	15	16	6	4	5	4	3	4	4	<1	1
14	18	15	16	5	4	5	5	3	4	1	<1	<1
15	19	16	17	5	4	4	5	4	5	2	<1	<1
16	16	14	15	5	4	4	5	4	4	3	<1	<1
17	15	14	14	4	4	4	5	4	4	2	<1	<1
18	15	14	15	4	4	4	5	4	4	18	<1	<1
19	14	13	13	4	3	4	5	4	4	28	<1	<1
20	23	14	17	4	3	4	4	3	4	1	<1	<1
21	17	16	17	4	3	4	4	3	4	1	<1	<1
22	16	15	16	4	4	4	31	3	4	2	<1	<1
23	16	14	15	4	4	4	11	4	7	3	<1	<1
24	16	14	15	4	4	4	9	3	6	2	<1	2
25	---	---	---	4	4	4	6	2	5	7	1	2
26	---	---	---	4	4	4	9	3	4	7	<1	2
27	---	---	---	4	3	4	27	4	4	10	<1	<1
28	>100	30	>100	4	2	4	38	5	20	3	<1	1
29	---	---	---	4	2	4	---	---	---	4	<1	1
30	---	---	---	4	2	3	---	---	---	2	<1	<1
31	---	---	---	4	2	4	---	---	---	4	<1	<1
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---
MARCH												
APRIL												
MAY												
DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
JUNE												
JULY												
AUGUST												
SEPTEMBER												
1	2	<1	<1	2	<1	<1	>100	63	>100	>100	5	7
2	3	<1	<1	86	<1	2	---	---	---	>100	9	23
3	2	<1	<1	14	<1	1	---	---	---	53	5	11
4	6	<1	<1	3	<1	1	---	---	---	---	---	---
5	3	<1	1	>100	2	4	---	---	---	---	---	---
6	8	<1	<1	26	4	5	---	---	---	25	<1	<1
7	7	<1	1	43	3	4	---	---	---	26	<1	<1
8	6	<1	<1	13	3	4	>100	<1	1	3	<1	<1
9	2	<1	<1	22	<1	<1	83	<1	<1	4	<1	<1
10	2	<1	<1	2	<1	<1	25	<1	<1	23	<1	<1
11	4	<1	<1	2	<1	<1	>100	<1	<1	14	<1	<1
12	2	<1	<1	2	<1	<1	27	<1	<1	4	<1	<1
13	3	<1	<1	19	<1	<1	6	<1	<1	73	<1	1
14	4	<1	<1	2	<1	<1	95	<1	2	>100	<1	33
15	2	<1	<1	<1	<1	<1	16	<1	<1	>100	<1	1
16	3	<1	<1	3	<1	<1	10	<1	1	---	---	---
17	1	<1	<1	16	<1	<1	13	1	3	---	---	---
18	2	<1	<1	6	<1	<1	15	3	5	6	<1	<1
19	2	<1	<1	10	<1	1	>100	5	14	2	<1	<1
20	6	<1	<1	2	<1	<1	>100	4	10	40	<1	<1
21	12	<1	<1	1	<1	<1	>100	3	4	>100	2	>100
22	3	<1	<1	1	<1	<1	38	2	5	>100	>100	>100
23	3	<1	<1	36	<1	<1	>100	4	15	>100	3	>100
24	---	---	---	41	<1	6	>100	5	11	61	4	9
25	---	---	---	>100	2	9	26	7	9	76	3	6
26	---	---	---	30	5	9	>100	7	10	>100	5	6
27	2	<1	<1	>100	18	>100	88	5	10	>100	3	5
28	1	<1	<1	>100	>100	>100	40	2	5	26	3	6
29	<1	<1	<1	>100	>100	>100	57	3	6	>100	3	5
30	1	<1	<1	>100	>100	>100	71	3	7	>100	4	5
31	---	---	---	>100	>100	>100	18	3	5	---	---	---
MAX	---	---	---	>100	>100	>100	---	---	---	---	---	---
MIN	---	---	---	<1	<1	<1	---	---	---	---	---	---

14338000 ELK CREEK NEAR TRAIL, OR

LOCATION.--(revised)Lat 42°40'44", long 122°44'27", in NE 1/4 NW 1/4 sec.30, T.33 S., R.1 E., Jackson County, Hydrologic Unit 17100307, on right bank 4.5 mi northeast of Trail and at mile 1.5.

DRAINAGE AREA.--129 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1945 to current year. Prior to March 1946 monthly discharge only, published in WSP 1318.

REVISED RECORDS.--WDR OR-89-2: Drainage area. WDR OR-92-1: 1989(M), 1990(M), 1991(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,493.91 ft above NGVD of 1929. Prior to July 5, 1946, nonrecording gage at various sites within 1.0 mi of present site at different datums. July 5, 1946, to June 22, 1950, nonrecording gage, and June 23, 1950, to May 23, 1954, water-stage recorder, at site 0.5 mi downstream at datum 25.21 ft lower, May 24, 1954, to Sept. 30, 1988 at site 0.8 mi downstream at datum 37.35 ft lower.

REMARKS.--No estimated daily discharges. Records poor. Diversions for irrigation upstream from station. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--56 years (water years 1947-2002), 217 ft³/s, 156,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,200 ft³/s Dec. 22, 1964, gage height, 18.84 ft, from rating curve extended above 4,700 ft³/s on basis of slope-area measurement of peak flow, site and datum then in use; minimum discharge, 0.01 ft³/s Oct. 8, 1987, result of dam construction 1.3 mi upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	0100	*4,060	*8.80	No other peak greater than base discharge.			
Minimum discharge, 0.65 ft ³ /s Aug. 18.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	12	457	904	203	218	205	95	36	12	2.6	1.4
2	2.5	10	435	1060	189	188	214	94	35	11	2.7	1.5
3	2.2	8.6	319	938	179	163	223	92	33	9.7	2.9	1.3
4	2.0	8.0	196	625	183	144	228	88	31	9.5	2.9	1.3
5	1.9	7.6	192	474	198	138	235	84	30	9.5	3.1	1.4
6	1.8	7.6	527	813	209	147	216	82	29	9.0	3.4	1.8
7	1.9	7.2	465	973	708	186	189	77	28	8.5	3.4	2.2
8	2.0	7.2	274	1100	1360	171	167	73	27	7.9	2.9	5.0
9	2.3	7.3	252	938	826	152	163	70	28	7.4	2.9	4.0
10	2.6	7.2	203	580	504	153	167	67	27	6.6	2.7	3.2
11	3.6	7.2	158	428	408	168	160	64	24	5.7	2.1	2.7
12	6.7	8.1	157	383	353	287	155	61	23	5.2	2.3	2.3
13	5.6	11	639	336	327	332	161	62	21	5.1	2.2	2.1
14	4.5	14	2090	284	312	320	306	61	20	5.1	1.8	1.8
15	4.2	13	676	237	278	306	321	58	18	5.5	1.5	1.7
16	4.0	20	680	200	260	281	247	56	18	5.0	1.1	1.6
17	3.6	35	1480	180	261	256	245	54	19	4.5	0.89	2.0
18	3.5	23	852	159	235	229	290	54	23	3.9	0.74	6.7
19	3.5	17	609	150	285	215	282	53	22	3.8	0.78	6.8
20	3.5	18	667	145	591	248	256	52	20	3.4	1.0	4.7
21	3.5	39	509	335	754	334	225	54	18	3.6	1.2	3.9
22	3.9	160	367	376	628	397	197	58	18	3.5	1.4	3.4
23	9.5	103	291	293	592	442	173	49	16	3.0	1.8	2.9
24	14	71	240	248	566	523	152	45	15	2.7	1.8	2.7
25	11	93	208	364	450	505	139	43	14	2.3	1.8	2.4
26	8.2	92	200	1170	349	419	133	42	13	2.1	1.6	2.4
27	7.1	66	238	712	290	317	126	41	12	2.4	1.6	2.2
28	6.8	160	433	444	253	263	113	45	12	2.3	1.7	2.4
29	6.9	317	564	329	---	232	105	44	13	2.9	1.5	2.6
30	8.2	183	670	261	---	215	101	40	12	3.2	1.5	3.1
31	11	---	1040	221	---	208	---	38	---	2.8	1.3	---
TOTAL	154.8	1533.0	16088	15660	11751	8157	5894	1896	655	169.1	61.11	83.5
MEAN	4.99	51.1	519	505	420	263	196	61.2	21.8	5.45	1.97	2.78
MAX	14	317	2090	1170	1360	523	321	95	36	12	3.4	6.8
MIN	1.8	7.2	157	145	179	138	101	38	12	2.1	0.74	1.3
AC-FT	307	3040	31910	31060	23310	16180	11690	3760	1300	335	121	166

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2002, BY WATER YEAR (WY)

	MEAN	29.8	182	436	516	504	413	282	162	59.0	14.7	6.40	7.03
MAX	404	1008	1851	1283	1131	1074	565	358	254	36.1	25.1	43.7	
(WY)	1951	1974	1965	1965	1958	1972	1956	1975	1953	1953	1976	1986	
MIN	3.17	8.92	13.1	19.8	23.1	45.4	65.8	21.6	7.42	1.39	0.21	0.60	
(WY)	1953	1994	1977	1977	1977	1977	1968	1992	1992	1994	1994	1992	

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1947 - 2002
ANNUAL TOTAL	28612.36	62102.51	
ANNUAL MEAN	78.4	170	217
HIGHEST ANNUAL MEAN			438
LOWEST ANNUAL MEAN			38.4
HIGHEST DAILY MEAN	2090	Dec 14	2090
LOWEST DAILY MEAN	0.13	Aug 22	0.74
ANNUAL SEVEN-DAY MINIMUM	0.14	Aug 18	1.0
ANNUAL RUNOFF (AC-FT)	56750		123200
10 PERCENT EXCEEDS	181		469
50 PERCENT EXCEEDS	29		49
90 PERCENT EXCEEDS	0.44		2.2
			156900
			546
			66
			4.6

14338000 ELK CREEK NEAR TRAIL, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1973 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: June 1973 to current year.

TURBIDITY: October 1999 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Water temperature records good. Turbidity records good November through May and fair the rest of the year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 33.0°C Aug. 24, 1999; minimum, 0.0°C at times during most winter periods.

TURBIDITY: Maximum recorded, 100 NTU Jan. 10, 2000 but may have been higher during periods of missing record; minimum recorded, <1 NTU many times during most years.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 29.3°C July 13; minimum, 2.4°C Jan. 16 but may have been lower during period of missing record.

TURBIDITY: Maximum recorded, 81 NTU Dec. 1, 2, but may have been higher during periods of missing record; minimum recorded, <1 NTU many times during the year.

WATER TEMPERATURE, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	19.0	14.6	16.9	12.2	11.0	11.5	6.4	6.1	6.3	7.8	7.0	7.4
2	19.6	15.2	17.5	12.8	10.9	11.7	7.1	6.1	6.5	8.1	7.2	7.6
3	19.5	14.8	17.1	12.5	9.7	10.8	6.8	6.1	6.5	7.6	6.8	7.1
4	19.7	14.7	16.9	11.8	8.9	10	6.1	5.4	5.7	6.9	5.7	6.3
5	18.8	14.7	16.6	10.7	9.3	9.9	5.7	3.5	4.3	7.5	6.3	6.8
6	18.9	14.0	16.0	11.7	8.9	10.1	6.0	4.8	5.4	8.1	7.3	7.7
7	17.5	13.6	15.4	11.0	7.9	9.0	6.4	5.5	5.9	8.1	7.4	7.8
8	16.6	13.4	14.6	10.1	7.0	8.2	6.3	4.9	5.6	8.2	7.5	7.9
9	17.1	12.1	14.0	8.9	6.6	7.5	6.2	5.3	5.7	7.6	6.3	6.9
10	15.3	11.9	13.4	9.1	6.5	7.7	5.3	4.2	4.6	6.9	5.7	6.4
11	15.8	12.8	13.9	9.5	8.0	8.5	5.3	4.3	4.8	7.0	5.7	6.4
12	14.4	11.8	12.9	10.7	9.5	10.1	5.3	4.5	4.9	7.4	5.6	6.8
13	15.2	11.8	13.4	10.3	9.8	10.0	5.7	5.2	5.4	---	---	---
14	15.8	11.5	13.4	10.6	9.7	10.2	6.6	5.7	6.3	---	---	---
15	15.4	11.7	13.3	10.3	9.8	10.1	6.3	5.8	6.0	---	---	---
16	14.5	12.3	13.2	10.4	9.8	10.2	6.9	5.8	6.2	3.6	2.4	3.1
17	15.4	11.5	13.0	9.8	8.8	9.3	7.3	6.4	6.7	4.3	3.0	3.6
18	14.2	10.5	12.0	8.8	7.7	8.1	6.5	5.9	6.2	4.6	3.5	4.0
19	14.4	10.5	12.1	9.1	8.0	8.4	6.6	5.8	6.2	4.4	3.3	3.9
20	14.8	11.0	12.6	8.9	8.4	8.6	6.6	5.8	6.2	4.2	3.2	3.5
21	14.0	10.7	12.2	8.5	8.1	8.3	6.1	5.3	5.7	4.4	3.3	3.9
22	12.4	11.6	12.0	8.5	7.9	8.2	---	---	---	5.1	4.3	4.6
23	12.9	10.9	11.7	8.4	7.6	8.0	---	---	---	5.5	4.4	4.8
24	11.6	9.6	10.5	8.0	6.2	7.1	---	---	---	5.0	3.8	4.5
25	11.4	8.7	9.8	6.6	5.8	6.2	---	---	---	5.3	4.6	4.9
26	11.8	8.4	9.8	7.0	6.1	6.4	---	---	---	6.2	5.2	5.7
27	10.4	8.7	9.5	6.2	4.9	5.4	---	---	---	5.8	4.8	5.3
28	10.7	9.4	10	5.3	3.6	4.0	6.6	4.0	5.9	5.0	4.0	4.4
29	11.1	9.7	10.4	6.2	4.1	5.4	7.3	6.0	6.6	4.1	2.7	3.4
30	11.4	10.6	11.0	6.6	5.5	6.0	7.4	6.1	6.7	4.1	2.5	3.3
31	11.6	10.7	11.2	---	---	---	7.7	7.0	7.3	3.9	2.6	3.2
MONTH	19.7	8.4	13.1	12.8	3.6	8.5	---	---	---	---	---	---
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	5.4	3.9	4.5	5.8	3.2	4.6	10.9	6.6	8.8	12.6	8.5	10.2
2	4.8	3.3	4.1	6.1	3.1	4.6	11.6	7.5	9.6	13.5	9.6	11.6
3	5.6	3.8	4.6	6.5	3.2	5.0	11.9	7.7	9.9	14.0	10.3	12.1
4	4.8	3.0	3.9	7.1	4.0	5.6	12.2	7.8	10.1	13.6	9.7	11.7
5	3.9	2.6	3.3	6.3	4.5	5.2	11.5	8.7	9.9	13.9	10.3	12.1
6	5.5	3.3	4.3	7.3	5.6	6.4	10.4	8.5	9.4	13.2	10.1	11.7
7	5.7	5.0	5.3	7.1	5.0	6.0	10.9	7.2	9.0	12.5	9.1	10.9
8	6.6	5.4	5.9	5.5	3.2	4.4	11.1	7.3	9.3	12.5	8.4	10.5
9	6.5	4.8	5.5	5.4	3.6	4.6	10.9	9.0	9.7	11.9	9.3	10.3
10	6.6	4.7	5.6	6.2	4.5	5.3	11.4	8.3	9.8	12.0	8.3	10.2
11	6.5	4.7	5.6	7.2	6.0	6.5	11.0	9.1	10.1	13.7	9.1	11.3
12	6.6	4.3	5.5	7.3	6.0	6.8	12.6	8.8	10.6	15.6	11.0	13.2
13	7.3	5.2	6.1	6.0	4.7	5.2	12.0	9.8	10.4	15.2	13.0	14.0
14	6.4	4.2	5.4	6.5	4.3	5.2	10.0	9.0	9.5	14.8	10.4	12.5
15	6.7	4.0	5.3	6.2	4.4	5.3	9.0	6.3	7.3	14.6	11.6	13.2
16	7.2	5.3	6.4	5.3	4.2	4.6	7.4	5.8	6.5	15.2	11.0	13.1
17	6.7	5.2	5.9	6.3	3.5	4.6	7.2	5.5	6.2	17.1	13.2	15.0
18	7.3	5.7	6.5	6.0	3.6	4.8	8.8	5.1	6.6	16.3	14.0	15.2
19	7.1	6.5	6.8	8.4	4.8	6.4	9.9	5.5	7.6	15.3	12.6	13.6
20	7.5	6.4	6.9	7.6	4.6	6.3	10.5	6.1	8.2	12.8	10.9	12.0
21	7.9	6.9	7.4	8.2	5.4	6.8	11.2	6.3	8.7	13.1	11.1	12.1
22	8.6	6.8	7.6	7.9	6.0	7.0	12.0	7.3	9.6	13.3	10.3	11.9
23	8.1	7.2	7.5	8.2	6.3	7.2	12.1	8.0	10.2	14.9	10.4	12.6
24	7.9	6.4	7.1	8.4	6.3	7.2	12.0	7.4	9.8	16.8	12.3	14.4
25	7.2	4.6	5.9	8.4	5.3	6.7	13.0	8.7	10.9	17.2	14.6	15.9
26	7.7	4.8	6.2	9.0	5.5	7.2	12.1	8.9	10.7	18.2	15.2	16.7
27	7.4	4.7	6.2	9.3	5.8	7.6	11.0	8.6	9.6	17.8	16.1	16.7
28	6.7	4.6	5.8	9.5	5.6	7.6	10.8	6.8	8.7	16.6	15.0	15.9
29	---	---	---	10.1	6.0	8.1	10.1	8.0	9.2	20.0	15.7	17.6
30	---	---	---	10.3	6.2	8.3	10.1	9.1	9.6	20.4	17.4	18.8
31	---	---	---	10.4	6.1	8.3	---	---	---	19.4	17.1	18.3
MONTH	8.6	2.6	5.8	10.4	3.1	6.1	13.0	5.1	9.2	20.4	8.3	13.4

ROGUE RIVER BASIN

14338000 ELK CREEK NEAR TRAIL, OR--Continued

WATER TEMPERATURE, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	18.8	16.9	17.8	25.4	20.7	22.8	23.3	19.1	20.8	25.0	18.3	21.2
2	18.9	16.1	17.5	25.3	20.5	22.8	23.1	18.7	20.4	25.5	18.9	21.7
3	18.4	16.0	17.2	24.7	20.4	22.3	22.4	18.1	19.6	25.0	18.8	21.2
4	20.1	16.3	18.1	24.4	19.7	21.7	21.3	17.5	18.7	24.2	17.4	20.1
5	20.8	17.9	19.3	24.3	19.2	21.7	22.2	16.6	18.7	23.5	16.7	19.3
6	20.1	17.7	18.9	25.1	19.9	22.5	21.4	16.7	18.7	22.0	16.8	18.5
7	18.4	16.5	17.4	24.0	20.8	22.2	21.8	16.1	18.8	22.1	16.6	18.6
8	16.5	14.8	15.7	25.0	19.7	22.2	21.4	16.3	18.8	20.3	16.7	18.2
9	16.5	13.6	15.0	26.1	20.1	23.2	22.5	16.6	19.6	20.5	15.7	18.2
10	18.4	14.3	16.2	27.9	21.7	24.7	23.5	18.1	20.5	20.9	16.0	18.6
11	20.6	16.1	18.3	28.7	23.1	25.8	23.9	18.4	20.9	21.8	16.6	19.2
12	22.3	18.0	20.1	28.9	23.7	26.1	24.8	18.5	21.4	22.6	17.2	19.8
13	23.3	19.5	21.4	29.3	23.9	26.3	26.7	19.7	22.9	23.3	17.8	20.3
14	23.5	19.9	21.6	27.8	22.9	25.1	26.9	20.9	23.5	22.3	18.3	20.1
15	23.6	19.7	21.5	27.3	22.4	24.7	26.6	20.1	22.8	22.3	17.7	19.5
16	23.1	19.9	21.5	27.0	22.0	24.4	26.5	18.8	22.1	22.2	16.8	19.0
17	21.1	17.7	19.3	27.4	22.0	24.5	26.2	18.5	21.7	20.0	17.9	18.8
18	19.7	17.0	18.3	27.6	22.0	24.6	25.3	17.9	21.0	20.5	17.3	18.7
19	20.6	16.9	18.6	27.5	22.0	24.4	24.5	17.2	20.2	21.2	17.0	18.9
20	21.7	17.7	19.6	27.9	21.5	24.4	24.2	17.5	20.0	20.9	16.7	18.8
21	22.6	18.6	20.6	27.6	21.7	24.6	24.1	16.7	19.9	21.1	16.3	18.7
22	23.7	19.6	21.5	25.1	22.2	23.8	24.7	17.3	20.4	20.9	16.3	18.7
23	23.5	19.8	21.5	28.1	21.7	24.6	24.2	18.3	20.9	21.2	16.2	18.6
24	24.3	19.8	21.8	28.1	22.2	24.8	24.7	18.6	21.2	20.9	15.9	18.3
25	25.0	20.2	22.4	28.2	22.0	24.6	24.4	19.2	21.4	21.4	15.7	18.2
26	25.7	21.2	23.3	28.0	21.8	24.2	24.1	18.5	20.9	19.4	15.3	17.3
27	25.5	21.6	23.5	25.6	21.6	23.2	24.6	18.1	21.0	19.8	14.8	17.0
28	23.7	21.5	22.6	24.7	20.4	22.2	25.9	18.9	22.1	19.6	14.6	16.8
29	24.5	21.3	22.7	23.8	20.4	22.0	24.9	19.8	22.0	17.1	14.4	15.6
30	25.2	21.0	22.9	26.1	20.3	22.4	24.9	19.1	21.4	16.9	13.8	14.8
31	---	---	---	23.8	20.5	21.9	24.8	17.6	20.7	---	---	---
MONTH	25.7	13.6	19.9	29.3	19.2	23.7	26.9	16.1	20.7	25.5	13.8	18.8

TURBIDITY (NTU), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
1	2	<1	<1	6	<1	<1	81	9	29	12	9	10
2	---	---	---	6	<1	<1	81	14	17	19	10	12
3	---	---	---	5	<1	<1	18	11	12	13	8	10
4	---	---	---	3	<1	<1	18	8	10	9	6	7
5	---	---	---	<1	<1	<1	24	7	8	6	5	6
6	---	---	---	5	<1	<1	22	10	18	13	5	11
7	---	---	---	1	<1	<1	19	10	12	11	8	9
8	---	---	---	<1	<1	<1	10	7	8	21	8	14
9	---	---	---	2	<1	<1	8	6	7	12	8	10
10	3	<1	1	<1	<1	<1	7	5	6	12	5	6
11	2	<1	1	2	<1	<1	6	5	5	6	4	5
12	4	<1	<1	<1	<1	<1	6	5	5	5	4	4
13	2	<1	<1	1	<1	<1	---	---	---	4	3	4
14	3	<1	<1	6	<1	<1	---	---	---	4	3	3
15	<1	<1	<1	8	<1	<1	38	14	20	3	2	3
16	1	<1	<1	7	<1	<1	32	12	14	4	2	2
17	<1	<1	<1	8	2	3	54	20	27	5	2	2
18	6	<1	<1	15	<1	1	21	12	16	4	2	2
19	2	<1	<1	2	<1	<1	19	10	13	2	2	2
20	6	<1	<1	<1	<1	<1	18	9	11	2	2	2
21	<1	<1	<1	7	<1	1	10	8	9	19	2	12
22	<1	<1	<1	27	7	19	10	7	7	14	8	11
23	8	<1	<1	13	4	7	8	5	6	9	6	7
24	4	<1	<1	4	2	3	8	5	5	7	5	6
25	6	<1	1	8	2	3	5	4	5	29	5	5
26	6	<1	3	19	4	6	6	4	4	41	16	24
27	13	<1	5	18	3	4	5	4	4	19	10	12
28	---	---	---	---	---	---	9	5	7	10	7	8
29	---	---	---	---	---	---	13	6	8	7	5	6
30	<1	<1	<1	14	9	11	11	8	9	8	4	5
31	4	<1	<1	---	---	---	25	10	16	5	4	4
MAX	---	---	---	---	---	---	---	---	---	41	16	24
MIN	---	---	---	---	---	---	---	---	---	2	2	2

ROGUE RIVER BASIN

14339000 ROGUE RIVER AT DODGE BRIDGE, NEAR EAGLE POINT, OR

LOCATION.--Lat 42°31'30", long 122°50'30", in SE 1/4 sec.17, T.35 S., R.1 W., Jackson County, Hydrologic Unit 17100307, on right bank 50 ft upstream from Dodge Bridge, 0.7 mi downstream from Reese Creek, 4.3 mi northwest of Eagle Point, and at mile 138.6.

DRAINAGE AREA.--1,215 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to current year.

REVISED RECORDS.--WSP 1094: 1942(M), 1943, 1945(M), 1946. WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,271.99 ft above NGVD of 1929. Prior to Dec. 21, 1938, nonrecording gage, Dec. 21, 1938, to Aug. 15, 1968, water-stage recorder, at datum 2.27 ft higher, Aug. 16, 1968, to Sept. 30, 1976, water-stage recorder, at datum 1.00 ft higher.

REMARKS.--Records good. Flow regulated since February 1977 by Lost Creek Lake (station 14335040). Diversions for irrigation upstream from station; most of low flow of Big Butte Creek (station 14337500) is diverted near Butte Falls. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--39 years (water years 1939-77), 2,636 ft³/s, 1,910,000 acre-ft/yr.
25 years (water years 1978-2002), 2,405 ft³/s, 1,742,000 acre-ft/yr, regulated period.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 87,600 ft³/s Dec. 22, 1964, gage height, 12.78 ft, datum then in use, from rating curve extended above 23,000 ft³/s; minimum discharge, 567 ft³/s Feb. 18, 1977, result of closure of Lost Creek dam, minimum prior to that time, 611 ft³/s Aug. 6, 14, 29, Sept. 9, 1940.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,000 ft³/s Dec. 14, gage height, 6.85 ft; minimum discharge, 819 ft³/s Oct. 18-20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1210	865	1990	2270	1230	1160	2060	2030	2680	1720	1730	1940
2	1020	864	1880	2640	1190	1130	2180	2440	2670	1720	1740	1930
3	978	865	1540	2540	1160	1070	2510	2520	2970	1710	1740	1920
4	990	864	1310	1940	1150	1050	2810	2510	3050	1720	1750	1920
5	983	865	2140	1660	1150	1030	3250	2460	3050	1710	1740	1930
6	967	865	2470	2850	1140	1060	3130	2450	3040	1700	1740	e2000
7	962	865	1970	2620	1700	1210	2790	2410	3050	1710	1980	e2100
8	958	868	1530	3140	3150	1150	2730	2240	3060	1710	2010	e2050
9	957	870	1350	2630	2140	1060	2610	2170	3060	1690	2000	e2000
10	901	873	1270	2700	1670	1040	2900	2160	3050	1690	2000	1980
11	899	874	1230	3220	1500	1070	3280	2040	3040	1680	1980	1970
12	894	890	1310	3060	1400	1200	3380	2020	3040	1690	1970	1970
13	859	883	2350	2870	1340	1230	3400	2140	3030	1710	1960	1870
14	849	885	6130	2650	1330	1240	4250	2230	3020	1710	1960	1750
15	846	883	2200	2480	1260	1230	6100	2230	2940	1710	1960	1640
16	849	908	1870	2330	1220	1220	6660	2240	2840	1710	1940	1580
17	849	928	3410	2170	1220	1300	5780	2190	2720	1710	1940	1520
18	838	913	2480	1890	1190	1560	4710	2230	2620	1710	1930	1440
19	834	893	2160	1620	1260	1630	3380	2320	2530	1720	1930	1320
20	830	905	2200	1400	2090	2000	2110	2250	2470	1720	1950	1210
21	833	937	1730	2270	2130	2080	1990	2190	2340	1720	1960	1120
22	848	1150	1430	2190	1840	2090	1930	2190	2250	1720	1980	1020
23	865	1100	1300	1770	1890	2030	1880	2090	2200	1710	1970	997
24	865	1040	1190	1570	1770	2210	1920	2100	2080	1710	1980	992
25	867	1120	1130	1540	1580	2340	2220	2110	1970	1710	1970	975
26	865	1080	1090	2960	1410	2510	2200	2100	1870	1710	1950	972
27	869	1000	1100	2430	1300	2530	2150	2480	1820	1720	1940	966
28	865	1400	1290	2000	1220	2420	2030	2500	1730	1730	1930	969
29	863	1930	1540	1760	---	2040	2010	2500	1700	1730	1930	1030
30	869	1330	1790	1460	---	1900	2020	2660	1700	1730	1950	1050
31	867	---	2630	1230	---	1960	---	2690	---	1730	1940	---
TOTAL	27949	29713	59010	69860	42630	48750	90370	70890	77590	53070	59450	46131
MEAN	902	990	1904	2254	1522	1573	3012	2287	2586	1712	1918	1538
MAX	1210	1930	6130	3220	3150	2530	6660	2690	3060	1730	2010	2100
MIN	830	864	1090	1230	1140	1030	1880	2020	1700	1680	1730	966
AC-FT	55440	58940	117000	138600	84560	96700	179200	140600	153900	105300	117900	91500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2002, BY WATER YEAR (WY)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	1293	1933	3077	2976	2579	2595	2748	2964	2566	2194	2198	1732													
MAX	1931	4925	9909	9857	6045	4645	4520	4658	3939	3777	3092	2200													
(WY)	1983	1985	1997	1997	1982	1989	1996	1984	1999	1984	1983	1983													
MIN	874	928	1274	1084	924	920	969	1577	1566	1116	1795	1288													
(WY)	1993	1988	1990	2001	2001	1992	1992	1992	2001	1992	1994	1980													

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1978 - 2002

ANNUAL TOTAL	508541	675413																							
ANNUAL MEAN	1393	1850																							
HIGHEST ANNUAL MEAN										2405															
LOWEST ANNUAL MEAN										4012															1997
HIGHEST DAILY MEAN				6130	Dec 14		6660	Apr 16		23000															Dec 15 1977
LOWEST DAILY MEAN				830	Oct 20		830	Oct 20		823															Feb 12 1981
ANNUAL SEVEN-DAY MINIMUM				840	Oct 15		840	Oct 15		840															Oct 15 2001
ANNUAL RUNOFF (AC-FT)				1009000			1340000			1742000															
10 PERCENT EXCEEDS				2180			2800			3930															
50 PERCENT EXCEEDS				1170			1770			2010															
90 PERCENT EXCEEDS				878			897			1140															

e Estimated

14339000 ROGUE RIVER AT DODGE BRIDGE, NEAR EAGLE POINT, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: August 1973 to current year.
TURBIDITY: October 1999 to current year.

INSTRUMENTATION.--Water-quality monitor since August 1973.

REMARKS.--Water temperature records good. Available turbidity records (March to September) poor. The probe was checked using a polymer bead standard.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE:

Prior to construction of Lost Creek Dam and Lake: Maximum, 20.0°C July 27, 28, 1975; minimum, 0.0°C Jan. 6-8, 10, 11, 1974, Jan. 6-9, 1977.

After full operation of Lost Creek Dam and Lake: Maximum, 21.0°C July 26-29, 1992; minimum, 0.5°C Feb. 5, 6, 1989.

TURBIDITY: Maximum, 98 NTU Jan. 11, 2000; minimum, <1 many days most years.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 18.5°C July 11; minimum, 2.5°C Jan. 30, 31.

TURBIDITY: Maximum, 29 NTU May 25, but may have been higher during period of missing record; minimum, <1 NTU many days.

WATER TEMPERATURE, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	12.5	8.2	10.3	8.2	6.6	7.4	7.1	6.1	6.7	7.3	6.3	6.8
2	12.7	8.4	10.7	8.5	6.2	7.3	7.0	5.6	6.3	7.6	6.6	7.1
3	12.3	8.3	10.5	7.8	5.2	6.7	7.2	6.0	6.5	6.9	6.0	6.4
4	11.9	8.2	10.3	7.9	5.1	6.6	6.6	5.6	6.1	6.1	5.0	5.7
5	11.9	8.0	10.1	7.9	5.9	6.9	6.2	4.5	5.3	6.7	5.5	6.0
6	11.9	8.1	10.0	8.2	6.1	7.1	6.4	5.1	5.7	7.6	6.5	7.0
7	10.0	6.6	8.3	7.0	4.0	5.7	6.4	5.1	5.8	7.6	7.0	7.2
8	9.8	6.5	8.2	7.0	4.1	5.8	6.3	5.0	5.7	8.2	7.0	7.5
9	9.7	5.6	7.8	7.2	4.7	6.1	6.5	5.1	5.8	7.2	6.0	6.5
10	8.8	5.6	7.5	7.9	5.1	6.7	5.7	4.4	5.1	6.3	5.1	5.8
11	10.1	7.4	8.6	8.9	6.5	7.7	6.1	4.9	5.4	6.3	5.1	5.7
12	9.5	5.8	7.8	8.2	7.2	7.5	5.9	5.0	5.5	6.7	5.4	5.9
13	10.0	6.5	8.4	7.6	6.6	7.1	6.2	5.4	5.7	6.3	4.9	5.6
14	9.8	6.1	8.3	8.4	6.7	7.5	6.2	5.3	5.7	6.0	4.9	5.4
15	9.5	6.4	8.1	7.8	6.4	7.3	5.9	5.0	5.5	5.9	4.2	5.0
16	9.2	6.7	8.1	7.9	7.1	7.5	6.8	5.4	6.0	5.7	3.8	4.7
17	9.2	6.4	7.9	8.4	6.6	7.4	6.7	5.8	6.3	5.9	4.3	5.0
18	8.5	4.9	7.0	7.7	5.8	6.8	6.2	5.1	5.6	6.0	4.5	5.2
19	8.6	5.2	7.1	8.6	6.8	7.6	6.1	5.1	5.6	5.8	4.4	5.0
20	9.2	6.1	7.8	7.8	6.7	7.1	6.3	5.1	5.9	5.3	4.1	4.8
21	8.4	5.3	7.3	7.5	6.9	7.2	6.2	5.2	5.6	5.1	4.2	4.8
22	8.1	6.6	7.4	8.1	7.1	7.5	6.2	4.5	5.4	5.3	4.0	4.6
23	8.0	6.2	7.1	8.3	6.8	7.5	6.2	4.9	5.4	5.8	4.2	4.9
24	7.6	4.7	6.2	7.6	6.2	6.7	5.2	3.8	4.5	5.4	3.8	4.6
25	8.1	4.6	6.4	7.3	6.1	6.7	5.9	4.0	4.9	5.5	4.5	4.9
26	8.3	5.0	6.8	7.8	6.3	6.9	6.0	4.7	5.3	5.8	4.5	5.1
27	7.5	5.5	6.7	7.1	5.7	6.3	6.1	4.8	5.4	5.4	4.0	4.6
28	7.8	6.3	7.1	6.5	5.2	5.7	6.2	4.9	5.7	5.2	3.5	4.3
29	7.7	6.1	6.9	7.0	5.0	5.9	7.0	5.5	6.2	4.8	3.0	3.8
30	7.8	6.6	7.2	7.2	5.7	6.5	6.7	5.4	6.1	5.0	2.5	3.7
31	8.2	6.4	7.4	---	---	---	7.4	6.3	6.8	4.5	2.5	3.7
MONTH	12.7	4.6	8.0	8.9	4.0	6.9	7.4	3.8	5.7	8.2	2.5	5.4

ROGUE RIVER BASIN

14339000 ROGUE RIVER AT DODGE BRIDGE, NEAR EAGLE POINT, OR--Continued

WATER TEMPERATURE, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	5.9	4.0	4.9	6.6	3.3	5.1	10.6	6.8	8.4	11.3	7.1	9.1
2	5.5	3.5	4.5	7.0	3.3	5.2	11.2	6.9	8.7	11.6	7.4	9.3
3	6.4	4.1	5.1	7.2	3.3	5.5	10.7	7.2	8.6	11.3	8.0	9.4
4	5.7	3.2	4.5	7.8	4.1	6.0	10.6	7.1	8.6	12.4	7.8	9.7
5	4.7	3.0	3.9	6.6	4.5	5.4	9.5	7.1	8.0	12.6	7.7	9.8
6	5.8	3.2	4.5	7.2	5.4	6.2	8.7	7.2	7.9	11.7	8.3	9.6
7	5.6	4.9	5.2	7.3	5.2	6.2	10.2	7.0	8.2	11.6	8.0	9.5
8	6.2	4.7	5.2	6.9	3.7	5.3	10.3	7.0	8.3	12.7	7.6	9.8
9	5.9	4.1	5.0	5.9	4.1	5.1	9.3	7.4	8.1	11.4	8.0	9.5
10	6.1	4.0	5.1	7.1	4.6	5.9	9.7	6.8	8.1	12.6	8.6	10.2
11	6.0	4.1	5.2	8.0	6.1	7.1	9.4	7.3	8.1	14.2	8.7	11.1
12	6.4	4.0	5.3	8.1	6.3	7.1	10.2	6.8	8.2	14.8	9.2	11.7
13	7.2	5.0	6.0	6.6	5.3	6.0	8.6	7.3	7.9	12.2	10.0	11.0
14	6.5	4.2	5.4	7.4	4.7	6.0	8.8	7.2	7.9	14.1	9.0	11.2
15	6.3	3.8	5.2	7.2	5.2	6.1	7.5	6.3	7.0	13.5	9.8	11.2
16	7.3	4.7	6.0	6.3	4.8	5.6	7.6	6.4	7.0	14.6	9.2	11.5
17	6.2	4.7	5.6	6.8	4.3	5.4	7.6	6.3	6.8	14.5	10.2	12.1
18	7.1	5.1	6.1	7.0	4.0	5.7	8.7	6.2	7.3	13.4	10.4	11.5
19	6.8	5.9	6.3	9.1	5.4	7.1	9.6	6.4	7.7	11.9	9.8	10.7
20	7.6	6.0	6.7	7.9	5.4	6.7	10.5	6.6	8.2	12.6	8.9	10.8
21	7.5	6.5	7.0	---	---	---	10.9	6.5	8.5	12.2	9.2	10.8
22	8.3	6.1	7.3	7.7	5.8	6.9	11.8	7.1	9.2	13.2	9.9	11.3
23	7.8	6.7	7.3	9.1	6.1	7.4	12.4	8.0	10.0	15.2	9.9	12.1
24	8.3	5.9	7.0	8.8	6.4	7.6	12.3	8.0	9.7	15.2	10.0	12.3
25	7.3	4.8	6.1	9.2	5.8	7.3	12.4	8.2	9.9	14.7	10.5	12.5
26	7.6	4.5	6.2	9.6	6.1	7.7	11.5	7.9	9.5	15.2	10.7	12.7
27	7.7	4.6	6.3	9.5	5.9	7.6	9.8	7.9	8.7	12.5	10.9	11.6
28	7.2	4.5	5.9	9.9	6.1	7.8	11.6	7.0	9.0	13.1	11.0	11.9
29	---	---	---	10.6	6.5	8.3	10.3	7.3	8.6	14.9	10.8	12.6
30	---	---	---	10.4	6.5	8.4	9.1	7.7	8.4	14.9	11.0	12.6
31	---	---	---	10.6	6.4	8.3	---	---	---	15.2	10.3	12.5
MONTH	8.3	3.0	5.7	---	---	---	12.4	6.2	8.3	15.2	7.1	11.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	14.2	10.7	12.2	17.2	11.3	14.0	14.6	10.6	12.5	17.0	12.3	14.4
2	15.3	10.6	12.3	17.6	10.9	14.0	14.7	10.5	12.5	17.2	12.7	14.6
3	14.0	9.7	11.7	17.4	11.2	13.9	14.5	10.0	12.3	16.8	12.3	14.4
4	14.9	10.4	12.3	17.0	10.6	13.8	14.2	10.5	12.2	16.0	11.5	13.7
5	14.7	10.6	12.4	17.3	11.0	13.8	14.8	10.5	12.4	16.1	11.8	13.4
6	14.3	10.5	12.1	17.6	11.3	14.0	15.5	10.4	12.7	15.4	11.7	13.1
7	14.2	9.7	11.7	16.5	11.8	13.8	15.6	10.5	12.9	16.0	11.6	13.4
8	12.9	9.8	11.3	17.3	11.2	13.9	15.8	10.6	12.9	14.8	11.3	12.9
9	13.3	9.9	11.4	18.0	11.3	14.3	15.9	10.9	13.2	15.4	10.7	12.8
10	14.7	10.1	12.0	18.4	11.7	14.7	16.0	11.1	13.4	15.0	10.4	12.5
11	15.2	10.5	12.4	18.5	12.1	15.1	16.1	11.3	13.6	15.0	10.6	12.7
12	15.1	10.9	12.7	17.1	11.9	14.3	16.8	11.1	13.8	15.3	11.0	12.8
13	15.5	11.0	12.8	17.8	12.0	14.6	17.2	11.7	14.3	15.7	11.2	13.1
14	15.2	10.4	12.4	17.3	11.5	14.2	16.8	12.1	14.3	14.9	11.3	12.9
15	15.0	9.9	12.3	17.8	11.4	14.4	16.9	12.0	14.2	14.3	11.2	12.6
16	15.1	10.2	12.5	17.5	11.4	14.3	16.7	11.5	14.1	13.7	10.1	11.9
17	12.2	10.8	11.6	17.9	11.7	14.6	16.9	11.7	14.2	12.2	10.1	11.1
18	14.5	11.0	12.5	18.1	11.9	14.7	16.7	12.0	14.1	14.2	9.7	11.7
19	15.3	10.2	12.4	18.0	11.9	14.8	16.5	11.7	14.0	14.4	9.7	11.9
20	15.4	10.0	12.3	18.0	11.5	14.7	16.0	11.9	13.9	14.6	9.8	12.1
21	15.8	10.2	12.8	17.9	11.8	14.8	16.8	11.7	14.2	14.5	9.8	12.2
22	15.9	10.6	13.0	15.6	12.1	13.9	16.8	11.8	14.2	14.6	9.8	12.3
23	15.7	10.4	13.0	17.8	12.0	14.6	17.0	12.0	14.1	13.7	9.1	11.6
24	16.7	10.8	13.4	17.6	11.5	14.5	17.0	12.3	14.5	13.6	8.8	11.3
25	17.1	10.9	13.7	16.9	11.5	14.1	16.7	12.5	14.4	13.1	8.7	11.1
26	16.9	11.3	13.9	16.2	10.8	13.5	16.7	12.3	14.4	12.6	8.6	10.8
27	16.4	10.7	13.6	15.0	10.4	12.8	17.1	12.2	14.5	13.0	8.8	11.0
28	15.4	11.3	13.1	14.6	10.2	12.3	17.6	12.7	14.8	12.9	8.5	10.9
29	16.1	11.1	13.4	14.7	10.3	12.5	16.9	12.9	14.7	11.6	8.8	10
30	17.0	10.6	13.6	15.4	10.8	12.9	16.6	12.6	14.5	11.6	8.0	9.7
31	---	---	---	15.1	10.8	12.9	16.9	11.9	14.2	---	---	---
MONTH	17.1	9.7	12.6	18.5	10.2	14.0	17.6	10.0	13.7	17.2	8.0	12.3

14354200 BEAR CREEK BELOW ASHLAND CREEK, AT ASHLAND, OR

LOCATION.--Lat 42°12'58", long 122°43'16", in SE 1/4 SE 1/4 sec.32, T.38 S., R.1 E, Jackson County, Hydrologic Unit 17100308, on left bank, 0.1 mi downstream from Ashland Creek, and at mile 21.0.

DRAINAGE AREA.--168 mi².

PERIOD OF RECORD.--July 1990 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,686.64 ft above NGVD of 1929.

REMARKS.--No estimated daily discharges. Records fair. Flow regulated since 1924 by Emigrant Lake. Water is diverted into basin from the Klamath River basin. Many diversions for irrigation and municipal use upstream from station.

AVERAGE DISCHARGE.--12 years (water years 1991-2002) 91.9 ft³/s, 66,560 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,000 ft³/s Jan. 1, 1997, gage height 11.00 ft; minimum discharge, 0.33 ft³/s Oct. 18, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 451 ft³/s Apr. 30, gage height, 2.54 ft; minimum daily discharge, 3.5 ft³/s Oct. 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	9.0	59	92	36	55	66	121	45	61	35	31
2	6.6	9.1	38	137	36	52	69	85	49	50	35	31
3	7.3	8.7	49	93	36	50	76	68	46	50	36	30
4	6.3	8.7	32	78	37	48	81	60	45	51	37	32
5	6.4	9.2	38	66	38	47	82	56	42	50	37	32
6	6.4	9.0	41	78	38	49	78	53	41	43	38	33
7	6.4	9.0	35	80	70	63	76	51	40	44	38	34
8	6.5	9.2	30	88	83	52	69	51	44	43	39	31
9	6.5	9.4	30	74	60	50	62	48	43	49	41	30
10	6.5	9.3	30	65	54	49	61	47	41	58	53	27
11	8.6	9.4	30	59	51	50	62	45	37	67	53	28
12	7.3	11	31	59	49	52	61	42	32	68	50	27
13	7.0	11	60	53	49	50	60	39	33	70	46	29
14	6.7	11	105	57	50	50	79	39	39	70	31	29
15	6.5	10	49	60	47	52	74	39	39	60	31	30
16	6.8	17	44	53	49	53	74	41	40	40	34	31
17	6.6	16	67	48	54	52	83	39	42	35	36	33
18	6.7	12	47	46	54	49	79	40	43	36	36	29
19	6.6	13	44	46	59	55	75	39	42	36	37	27
20	6.6	16	51	44	111	69	71	48	41	39	37	25
21	6.7	31	40	59	104	76	65	68	43	40	36	24
22	6.4	26	37	49	98	76	58	53	48	39	36	24
23	7.7	17	35	44	103	81	54	43	49	40	34	21
24	7.0	25	33	42	92	105	53	38	50	47	34	18
25	7.3	29	32	44	85	91	46	35	53	56	33	18
26	7.5	23	31	52	75	78	54	36	54	65	35	15
27	7.3	18	35	45	66	73	69	36	64	59	44	16
28	7.9	55	45	39	60	67	54	37	71	56	45	17
29	8.6	35	69	37	---	65	63	40	74	52	43	20
30	8.7	26	68	36	---	66	248	39	68	47	40	23
31	11	---	97	36	---	65	---	38	---	35	35	---
TOTAL	218.4	502.0	1432	1859	1744	1890	2202	1514	1398	1556	1195	795
MEAN	7.05	16.7	46.2	60.0	62.3	61.0	73.4	48.8	46.6	50.2	38.5	26.5
MAX	11	55	105	137	111	105	248	121	74	70	53	34
MIN	4.0	8.7	30	36	36	47	46	35	32	35	31	15
AC-FT	433	996	2840	3690	3460	3750	4370	3000	2770	3090	2370	1580

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2002, BY WATER YEAR (WY)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	17.3	40.0	132	188	134	133	134	125	72.3	50.5	49.5	28.2
MAX	29.2	214	791	1091	607	343	326	465	197	70.1	72.1	43.5
(WY)	1998	1999	1997	1997	1996	1998	1998	1998	1998	1998	2000	1998
MIN	4.93	9.70	14.4	16.4	16.9	13.6	12.7	22.3	34.8	23.6	35.2	8.33
(WY)	1991	1993	1991	2001	1992	1992	1992	1992	1994	1992	1994	1992

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1991 - 2002

ANNUAL TOTAL	11559.8	16305.4										
ANNUAL MEAN	31.7	44.7								91.9		
HIGHEST ANNUAL MEAN										226		1997
LOWEST ANNUAL MEAN										22.0		1992
HIGHEST DAILY MEAN	121	Mar 28				248	Apr 30		6910	Jan 1		1997
LOWEST DAILY MEAN	4.0	Sep 30				4.0	Oct 1		0.90	Oct 20		1990
ANNUAL SEVEN-DAY MINIMUM	5.3	Sep 26				6.2	Oct 1		1.4	Oct 23		1990
ANNUAL RUNOFF (AC-FT)	22930					32340			66560			
10 PERCENT EXCEEDS	53					74			213			
50 PERCENT EXCEEDS	31					43			43			
90 PERCENT EXCEEDS	7.8					9.2			13			

14357500 BEAR CREEK AT MEDFORD, OR

LOCATION.--(Revised)Lat 42°19'27", long 122°51'56", in NW 1/4 sec.30, T.37 S., R.1 W., Jackson County, Hydrologic Unit 17100308, on left bank 50 ft downstream from Cottage Street, in Medford, and at mile 10.1.

DRAINAGE AREA.--289 mi².

PERIOD OF RECORD.--March 1915 to June 1920 (no low-flow records), October 1920 to September 1981, December 1983 to current year. Monthly discharge only for some periods, published in WSP 1318.

REVISED RECORDS.--WSP 1044: 1944. WSP 1448: 1916, 1917(M), 1918-20, 1922, 1924, 1927(M), 1928, 1930. WSP 1568: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,343.27 ft above NGVD of 1929. Prior to Sept. 19, 1991, at site 0.2 mi downstream, at datum 1.29 ft lower, Dec. 31, 1947, to Sept. 23, 1985, at datum 2.00 ft higher. See WSP 1738 for history of changes prior to Dec. 31, 1947.

REMARKS.--Records good. Flow partly regulated since 1924 by Emigrant Lake. Water is diverted into basin from the Klamath River basin. Many diversions for irrigation and municipal use upstream from station. Bureau of Reclamation satellite telemeter at station.

AVERAGE DISCHARGE.--80 years (water years 1921-81, 1984-2002), 114 ft³/s, 82,550 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,600 ft³/s Jan. 1, 1997, gage height, 14.69 ft, present datum; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 1,160 ft³/s Apr. 30, gage height, 5.85 ft; minimum daily discharge, 12.0 ft³/s Oct. 19-21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e24	16	135	180	60	82	100	215	37	43	30	27
2	e24	17	100	286	59	77	103	131	51	35	31	27
3	e22	17	143	222	57	73	98	101	54	38	31	26
4	e17	18	77	154	57	70	91	88	45	43	36	27
5	e15	20	130	130	59	69	99	78	40	44	36	29
6	e15	21	110	145	58	73	104	73	35	38	37	33
7	e14	e21	76	166	90	110	101	64	34	37	37	45
8	e14	e21	62	201	155	83	93	60	45	36	35	42
9	e14	22	61	165	98	77	87	65	45	28	34	37
10	e15	24	60	135	84	76	88	73	46	31	33	32
11	e16	25	59	120	79	75	85	62	35	34	30	28
12	e15	37	61	115	75	77	89	53	32	33	30	27
13	e15	32	178	107	72	80	86	47	30	35	26	27
14	e14	27	455	100	72	91	107	40	34	47	25	31
15	e14	26	145	93	69	87	107	36	35	40	24	31
16	e14	57	110	82	70	92	103	35	48	28	25	32
17	e14	39	190	75	73	104	112	31	43	27	29	33
18	e14	28	139	71	77	92	118	30	39	28	31	44
19	14	36	127	72	94	85	96	38	34	28	34	41
20	13	38	148	68	209	111	96	61	35	28	33	36
21	14	89	108	144	167	128	87	119	35	30	33	35
22	17	88	90	105	146	139	79	89	36	30	31	32
23	15	42	79	83	160	139	65	62	40	29	32	34
24	15	93	72	75	135	189	58	52	41	32	32	31
25	15	69	66	75	120	160	47	38	38	34	34	32
26	15	53	64	90	109	123	44	33	32	32	34	31
27	15	41	66	80	100	109	86	34	32	30	33	32
28	16	110	94	68	89	101	70	39	42	31	32	33
29	17	98	175	63	---	103	e80	39	42	33	31	35
30	19	55	155	59	---	101	e617	33	45	30	32	50
31	18	---	224	59	---	99	---	33	---	28	27	---
TOTAL	493	1280	3759	3588	2693	3075	3196	1952	1180	1040	978	1000
MEAN	15.9	42.7	121	116	96.2	99.2	107	63.0	39.3	33.5	31.5	33.3
MAX	24	110	455	286	209	189	617	215	54	47	37	50
MIN	13	16	59	59	57	69	44	30	30	27	24	26
AC-FT	978	2540	7460	7120	5340	6100	6340	3870	2340	2060	1940	1980

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2002, BY WATER YEAR (WY)

	32.3	63.0	158	219	212	196	194	138	74.6	33.5	34.1	36.0
MEAN	32.3	63.0	158	219	212	196	194	138	74.6	33.5	34.1	36.0
MAX	216	367	1137	1365	873	787	686	652	264	95.4	115	91.6
(WY)	1963	1999	1965	1997	1958	1957	1974	1998	1998	1971	1976	1971
MIN	4.74	8.23	17.3	13.2	11.5	13.7	4.88	1.46	2.12	0.53	0.39	0.70
(WY)	1932	1937	1937	1937	1931	1931	1931	1931	1931	1924	1924	1931

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1921 - 2002

ANNUAL TOTAL	15798.0	24234	
ANNUAL MEAN	43.3	66.4	114
HIGHEST ANNUAL MEAN			304
LOWEST ANNUAL MEAN			8.42
HIGHEST DAILY MEAN	455	Dec 14	617
LOWEST DAILY MEAN	4.4	Sep 23	13
ANNUAL SEVEN-DAY MINIMUM	10	Sep 23	14
ANNUAL RUNOFF (AC-FT)	31340		48070
10 PERCENT EXCEEDS	78		260
50 PERCENT EXCEEDS	30		52
90 PERCENT EXCEEDS	17		12

e Estimated

14359000 ROGUE RIVER AT RAYGOLD, NEAR CENTRAL POINT, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: August 1973 to current year.

INSTRUMENTATION.--Temperature recorder since August 1973.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, prior to operation of Lost Creek Dam, 22.0°C July 25, 26, 1976; minimum, 0.0°C Jan. 7, 1974. Maximum since full operation of Lost Creek Dam, 26.0°C July 26, 1996; minimum, 1.0°C Dec. 30, 1978, Jan. 30, 1980, Feb. 5, 6, 1989, Dec. 26, 1989, Dec. 21, 1990.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 19.8°C July 11, 12; minimum, 2.7°C Jan. 30.

WATER TEMPERATURE, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	12.8	11.8	12.3	9.7	9.2	9.4	7.5	6.8	7.2	7.6	7.2	7.4
2	13.2	12.2	12.7	9.7	8.7	9.1	7.0	6.3	6.6	8.0	7.5	7.7
3	13.2	12.3	12.8	9.1	7.9	8.5	7.0	6.5	6.8	7.7	6.6	6.9
4	12.9	12.0	12.6	8.5	7.5	7.9	6.8	6.1	6.4	6.6	5.7	6.0
5	12.7	11.9	12.4	8.3	7.8	8.0	6.4	5.5	6.0	6.9	5.8	6.2
6	12.4	11.6	12.1	9.1	8.2	8.5	6.5	5.7	6.1	8.0	6.9	7.4
7	12.1	10.5	11.2	8.4	6.2	7.3	6.3	5.7	6.0	8.0	7.6	7.8
8	10.6	10.0	10.3	6.8	6.0	6.3	6.2	5.7	5.9	8.4	7.8	8.0
9	10.4	9.3	9.7	6.7	5.9	6.4	6.2	5.6	5.9	8.0	6.7	7.3
10	9.6	8.8	9.3	7.5	6.4	6.9	6.0	4.8	5.2	6.7	5.7	6.1
11	10.6	9.6	10.2	9.5	7.5	8.5	5.7	5.0	5.3	6.2	5.4	5.8
12	10.5	9.4	9.9	9.9	9.0	9.4	5.9	5.6	5.7	6.6	5.5	6.0
13	10.6	9.5	10.1	9.0	8.1	8.5	6.3	5.8	5.9	6.3	5.2	5.7
14	11.0	10.0	10.5	9.4	8.2	8.7	6.3	5.6	5.9	5.9	5.1	5.5
15	10.8	9.9	10.3	9.2	8.3	8.6	5.8	5.3	5.6	5.4	4.3	4.9
16	10.8	10.2	10.4	9.1	8.5	8.8	6.8	5.8	6.2	5.0	3.7	4.3
17	10.9	9.7	10.2	9.0	8.2	8.5	6.8	6.3	6.6	5.2	4.3	4.7
18	10.0	8.5	9.2	8.5	7.1	7.7	6.4	5.7	5.9	5.6	4.7	5.1
19	9.3	8.0	8.7	8.9	7.7	8.3	6.0	5.3	5.8	5.4	4.6	5.0
20	10.1	8.7	9.4	8.9	7.7	8.2	6.3	5.9	6.1	5.2	4.7	5.0
21	10.1	9.2	9.6	8.2	7.6	7.8	6.3	5.8	6.1	5.2	4.6	5.0
22	10.0	9.4	9.7	8.8	8.0	8.4	6.3	5.2	5.7	5.0	4.0	4.5
23	9.8	8.6	9.2	8.4	7.6	7.8	6.2	5.8	6.0	5.6	4.5	5.0
24	8.6	7.1	7.8	8.1	7.0	7.5	5.8	4.4	4.9	5.3	4.1	4.6
25	8.2	6.8	7.4	7.1	6.4	6.7	5.7	4.6	5.0	5.4	4.4	4.8
26	8.7	7.3	7.9	7.1	6.7	6.9	6.0	5.4	5.6	5.5	5.0	5.2
27	8.6	7.9	8.2	7.0	6.0	6.4	6.3	5.6	5.9	5.0	4.2	4.7
28	8.8	8.2	8.5	6.4	5.7	5.9	6.5	5.7	6.1	4.8	3.5	4.2
29	8.9	8.5	8.7	6.7	5.6	6.1	7.4	6.3	6.7	4.3	2.9	3.6
30	9.3	8.6	9.0	7.2	6.4	6.8	7.1	6.4	6.7	4.0	2.7	3.4
31	9.3	8.8	9.0	--	--	--	7.6	6.8	7.2	3.9	2.9	3.4
MONTH	13.2	6.8	10.0	9.9	5.6	7.8	7.6	4.4	6.0	8.4	2.7	5.5

14361500 ROGUE RIVER AT GRANTS PASS, OR

LOCATION.--Lat 42°25'50", long 123°19'00", in NW 1/4 sec.20, T.36 S., R.5 W., Josephine County, Hydrologic Unit 17100308, on right bank at city of Grants Pass filter plant, 0.6 mi upstream from bridge on State Highway 99 at Grants Pass, and at mile 101.8. Prior to Sept. 3, 1983, at site 300 ft upstream.

DRAINAGE AREA.--2,459 mi².

PERIOD OF RECORD.--October 1938 to current year. Prior to January 1939 monthly discharge only, published in WSP 1318.

REVISED RECORDS.--WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 884.28 ft above NGVD of 1929. Prior to Aug. 8, 1957, at site 300 ft upstream at datum 4.00 ft higher and Aug. 8, 1957, to Sept. 2, 1983, at site 300 ft upstream at datum 1.00 ft higher.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since February 1977 by Lost Creek Lake (station 14355040), slight regulation by Fish Lake and Emigrant Lake. Large fluctuations at times caused by Savage Rapids Dam 5.5 mi upstream from station. Many diversions from Rogue River and tributaries upstream from station, the largest of which is at Savage Rapids Dam of Grants Pass Irrigation District, 5.5 mi upstream from station. Continuous water-quality records for the period August 1973 to September 1987 have been collected at this location. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--39 years (water years 1939-77), 3,543 ft³/s, 2,566,000 acre-ft/yr.
25 years (water years 1978-2002), 3,253 ft³/s, 2,357,000 acre-ft/yr, regulated period.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 152,000 ft³/s Dec. 23, 1964, gage height, 35.15 ft, present datum, from rating curve extended above 93,000 ft³/s; minimum discharge, 195 ft³/s Jan. 30, 1961; minimum daily, 606 ft³/s Sept. 10, 1968.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in December 1861 reached a stage of about 43 ft, present datum (information furnished by Corps of Engineers). Flood in February 1890 reached a stage of about 36 ft, present datum, and that of Feb. 21, 1927, about 32 ft, present datum, according to local resident.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,000 ft³/s Dec. 14, gage height, 7.43 ft; minimum discharge, 919 ft³/s Oct. 13, result of regulation at Savage Rapids Dam.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1320	1120	2320	4080	1730	1750	2540	3340	2700	1580	1560	1810
2	1240	1100	4180	4300	1670	1630	2610	2930	2680	1580	1560	1810
3	1110	1090	3000	4780	1600	1560	2930	3010	2890	1560	1580	1790
4	1110	1090	2330	3420	1570	1490	3280	2630	3130	1580	1590	1800
5	1150	1090	3440	2740	1550	1460	3750	2830	3130	1580	1610	1800
6	1120	1090	5450	5680	1530	1480	4040	2790	3120	1570	1590	1850
7	1120	1080	3680	5410	1880	1740	3400	2740	3130	1560	1660	1990
8	1120	1080	2350	6340	5680	1800	3410	2380	3150	1560	1850	1990
9	1230	1080	1950	5470	4090	1540	3140	2210	3210	1530	1820	1950
10	1450	1080	1820	4200	3020	1500	3300	2200	3180	1510	1810	1910
11	1080	1080	1760	4570	2480	1480	3890	2100	3130	1500	1820	1900
12	1070	1120	1890	4270	2200	1620	3940	1940	3100	1520	1810	1880
13	1020	1130	2170	3980	2020	1740	4040	1970	3090	1530	1770	1840
14	975	1110	10200	3560	1920	1830	4640	2150	3050	1580	1750	1710
15	1020	1120	5070	3290	1840	1830	6680	2090	3030	1600	1730	1620
16	1040	1230	3100	3000	1730	1830	7890	2090	2910	1570	1730	1540
17	1050	1240	5570	2780	1680	1950	7240	2080	2820	1570	1730	1500
18	1050	1180	4840	2480	1660	2210	6170	2000	2690	1550	1730	1460
19	1040	1140	4460	2180	1710	2170	4810	2210	2570	1560	1750	1400
20	1060	1170	4150	1830	3790	2640	2990	2300	2390	1570	1740	1300
21	1040	1240	3220	3040	4380	2830	2510	2280	2310	1570	1780	1220
22	1060	1620	2390	4200	3440	3000	2350	2270	2190	1570	1800	1170
23	1060	1600	2000	2880	3380	3020	2220	2150	2120	1570	1820	1090
24	1080	1460	1750	2380	3160	3520	2110	2070	2030	1550	1810	1040
25	1080	1700	1590	2250	2700	3580	2380	2020	1880	1550	1810	1040
26	1070	1570	1490	4620	2340	3610	2390	2020	1760	1550	1810	1050
27	1070	1380	1450	4310	2070	3460	2430	2230	1650	1570	1790	1050
28	1070	1500	1590	3280	1900	3290	2330	2500	1580	1580	1790	1060
29	1090	3800	2040	2710	---	2900	2280	2510	1570	1580	1780	1070
30	1120	2180	2870	2240	---	2470	3190	2590	1580	1570	1810	1100
31	1120	---	4370	1840	---	2450	---	2690	---	1570	1810	---
TOTAL	34235	40470	98490	112110	68720	69380	108880	73320	77770	48390	54000	45740
MEAN	1104	1349	3177	3616	2454	2238	3629	2365	2592	1561	1742	1525
MAX	1450	3800	10200	6340	5680	3610	7890	3340	3210	1600	1850	1990
MIN	975	1080	1450	1830	1530	1460	2110	1940	1570	1500	1560	1040
AC-FT	67910	80270	195400	222400	136300	137600	216000	145400	154300	95980	107100	90730

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2002, BY WATER YEAR (WY)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	1488	2682	4836	4838	4528	4097	4017	3697	2807	2160	2144	1806													
MAX	2282	7669	17620	16600	10960	8119	6843	6428	4572	3485	3080	2642													
(WY)	1984	1985	1997	1997	1983	1983	1998	1993	1999	1984	1983	1983													
MIN	1008	1160	1557	1348	1250	1099	1211	1857	1549	1059	1620	1333													
(WY)	1995	1988	1990	2001	2001	1992	1994	1992	1992	1992	1994	1980													

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1978 - 2002
ANNUAL TOTAL	623025	831505	
ANNUAL MEAN	1707	2278	3253
HIGHEST ANNUAL MEAN			5840
LOWEST ANNUAL MEAN			1538
HIGHEST DAILY MEAN	10200	Dec 14	69000
LOWEST DAILY MEAN	975	Oct 14	744
ANNUAL SEVEN-DAY MINIMUM	1030	Oct 13	799
ANNUAL RUNOFF (AC-FT)	1236000	1649000	2357000
10 PERCENT EXCEEDS	2800	3840	6050
50 PERCENT EXCEEDS	1390	1840	2260
90 PERCENT EXCEEDS	1120	1100	1310

14361900 APPLGATE LAKE NEAR COPPER, OR

LOCATION.--Lat 42°03'25", long 123°06'30", in SE 1/4 sec.25, T.40 S., R.4 W., Jackson County, Hydrologic Unit 17100309, in outlet structure of Applegate Dam on Applegate River, 2.5 mi northeast of former town of Copper, 13 mi south of Ruch, and at mile 46.3.

DRAINAGE AREA.--223 mi².

PERIOD OF RECORD.--December 1980 to current year.

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

REMARKS.--Reservoir is formed by earthfill dam completed in October 1980. Storage began Dec. 2, 1980. Total capacity, 82,200 acre-ft between elevations 1,763.0 ft and 1,987.0 ft, maximum pool elevation. Elevation of gated spillway crest, 1,943.7 ft. Usable contents, 75,200 acre-ft between elevations 1,854.0 ft and 1,987.0 ft. Water is used for flood control, recreation, pollution abatement, irrigation, and other purposes. U.S. Army Corps of Engineers satellite telemeter at station.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 82,610 acre-ft May 11, 1997, elevation, 1,987.41 ft; minimum contents since first filling, 7,230 acre-ft Jan. 11, 1991, elevation, 1,855.1 ft, from graph of gage readings furnished by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 82,190 acre-ft May 2, 15, 16, 20, 21, 30, elevation, 1,986.99 ft; minimum observed contents, 11,730 acre-ft Nov. 15, 16, elevation, 1,872.98 ft.

ELEVATION, in FT (NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1887.72	1877.48	1889.43	1890.26	1891.18	1932.38	1959.30	1986.98	1986.92	1979.59	1967.41	1952.25
2	1887.48	1877.02	1890.93	1892.38	1892.10	1933.48	1960.50	1986.88	1986.87	1979.29	1966.94	1951.72
3	1887.24	1876.62	1891.75	1892.26	1892.93	1934.49	1962.04	1986.91	1986.76	1978.97	1966.47	1951.19
4	1887.00	1876.22	1891.78	1891.61	1893.68	1935.43	1963.92	1986.89	1986.63	1978.66	1966.02	1950.65
5	1886.74	1875.79	1891.88	1891.82	1894.40	1936.36	1965.94	1986.89	1986.48	1978.32	1965.55	1950.11
6	1886.48	1875.37	1892.90	1901.68	1895.13	1937.36	1967.70	1986.91	1986.32	1977.97	1965.10	1949.57
7	1886.22	1874.97	1893.08	1907.63	1897.72	1938.48	1969.16	1986.91	1986.09	1977.62	1964.63	1949.04
8	1885.97	1874.60	1892.72	1913.77	1900.52	1939.37	1970.45	1986.90	1985.82	1977.27	1964.16	1948.49
9	1885.72	1874.23	1892.12	1910.74	1902.42	1940.24	1971.60	1986.92	1985.51	1976.91	1963.68	1947.95
10	1885.46	1873.85	1891.78	1904.21	1903.98	1941.08	1972.10	1986.90	1985.18	1976.54	1963.22	1947.39
11	1885.24	1873.48	1891.73	1896.30	1905.32	1941.98	1972.83	1986.89	1984.83	1976.18	1962.74	1946.84
12	1885.04	1873.29	1891.46	1890.77	1906.50	1943.54	1973.64	1986.90	1984.47	1975.81	1962.27	1946.27
13	1884.80	1873.17	1892.76	1890.12	1907.62	1944.77	1974.56	1986.95	1984.09	1975.42	1961.80	1945.69
14	1884.56	1873.12	1894.60	1890.04	1908.67	1945.80	1975.36	1986.96	1983.69	1975.04	1961.32	1945.11
15	1884.32	1872.98	1891.34	1890.04	1909.67	1946.76	1975.80	1986.99	1983.27	1974.64	1960.84	1944.52
16	1884.07	1873.88	1889.59	1889.88	1910.62	1947.62	1976.56	1986.94	1982.92	1974.25	1960.35	1943.94
17	1883.80	1874.38	1890.60	1889.87	1911.56	1948.42	1977.34	1986.95	1982.65	1973.87	1959.85	1943.36
18	1883.55	1874.41	1890.20	1889.85	1912.45	1949.12	1978.10	1986.94	1982.51	1973.48	1959.36	1942.79
19	1883.30	1874.40	1890.08	1889.83	1913.62	1949.79	1978.90	1986.94	1982.37	1973.09	1958.87	1942.20
20	1883.04	1875.02	1890.03	1889.83	1916.68	1950.44	1979.76	1986.99	1982.19	1972.67	1958.37	1941.59
21	1882.79	1878.03	1889.64	1889.85	1919.77	1951.10	1980.55	1986.92	1982.01	1972.27	1957.87	1941.00
22	1882.54	1881.61	1889.65	1889.60	1922.69	1951.82	1981.35	1986.86	1981.85	1971.85	1957.36	1940.39
23	1882.16	1882.68	1889.62	1889.57	1925.64	1952.60	1982.16	1986.75	1981.65	1971.46	1956.86	1939.78
24	1881.64	1883.36	1889.72	1889.54	1927.20	1953.35	1982.71	1986.63	1981.44	1971.03	1956.35	1939.16
25	1881.10	1883.84	1889.74	1889.75	1928.10	1954.06	1983.32	1986.58	1981.21	1970.59	1955.85	1938.54
26	1880.57	1884.14	1889.69	1889.72	1928.81	1954.74	1984.08	1986.59	1980.97	1970.14	1955.35	1937.90
27	1880.02	1884.37	1889.80	1889.66	1929.74	1955.40	1984.81	1986.63	1980.72	1969.69	1954.85	1937.28
28	1879.47	1885.97	1890.06	1889.63	1931.13	1956.06	1985.53	1986.79	1980.44	1969.23	1954.34	1936.65
29	1878.93	1887.27	1890.12	1889.43	---	1956.76	1986.28	1986.97	1980.17	1968.78	1953.83	1936.02
30	1878.41	1887.90	1890.22	1889.33	---	1957.54	1986.92	1986.95	1979.89	1968.32	1953.31	1935.37
31	1877.99	---	1890.21	1890.19	---	1958.36	---	1986.95	---	1967.87	1952.77	---
MAX	1887.72	1887.90	1894.60	1913.77	1931.13	1958.36	1986.92	1986.99	1986.92	1979.59	1967.41	1952.25
MIN	1877.99	1872.98	1889.43	1889.33	1891.18	1932.38	1959.30	1986.58	1979.89	1967.87	1952.77	1935.37
(†)	13240	16600	17450	17450	37340	56700	82130	82160	75370	64590	52330	40010
(‡)	-3390	+3360	+850	0	+19890	+19360	+25430	+30	-6780	-10780	-12260	-12320

CAL YR 2001 MAX --- MIN --- AC-FT† +6870
WTR YR 2002 MAX 1986.99 MIN 1872.98 AC-FT† +23390

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

14362000 APPLGATE RIVER NEAR COPPER, OR

LOCATION.--Lat 42°03'50", long 123°06'37", in SW 1/4 NW 1/4 sec.30, T.40 S., R.3 W., Jackson County, Hydrologic Unit 17100309, U.S. Corps of Engineers land, on left bank 0.1 mi downstream from Brushy Gulch, 0.6 mi downstream from Applegate Dam, 3.1 mi northeast of former town of Copper, and at mile 45.7.

DRAINAGE AREA.--225 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to current year. Prior to January 1939 monthly discharge only, published in WSP 1318.

REVISED RECORDS.--WDR OR-78-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,747.51 ft above NGVD of 1929. Prior to Oct. 1, 1977, at site 0.6 mi upstream at datum 12.15 ft higher.

REMARKS.--Records good. Flow regulated since December 1980 by Applegate Lake (station 14361900). Some storage during winter in Squaw Lakes Reservoir, capacity, 1,100 acre-ft on Squaw Creek upstream from station. Diversions upstream from station from Carberry Creek for irrigation in Thompson Creek basin. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--43 years (water years 1939-81), 438 ft³/s, 317,300 acre-ft/yr.
21 years (water years 1982-2002), 428 ft³/s, 310,000 acre-ft/yr, regulated period.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 29,800 ft³/s Jan. 15, 1974, gage height, 25.38 ft, site and datum then in use, from high-water mark in well, from rating curve extended above 12,000 ft³/s on basis of four slope-area measurements of peak flows made in 1950, 1955, 1964, and 1974; minimum discharge, 1.5 ft³/s Dec. 20, 1980, result of regulation at Applegate dam, 0.6 mi upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,200 ft³/s Jan. 10, gage height, 6.11 ft; minimum discharge, 61 ft³/s Oct. 17, 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	110	72	785	104	101	102	513	431	243	242	240
2	65	103	72	1190	103	101	102	613	411	239	242	239
3	65	89	134	1220	104	99	101	544	400	238	242	239
4	65	90	203	953	104	99	101	544	401	238	242	239
5	66	92	234	698	103	99	102	544	401	240	242	239
6	66	91	361	860	103	99	100	523	400	241	242	239
7	65	87	362	1150	104	100	106	507	399	241	241	239
8	65	80	361	1330	102	100	159	468	399	241	241	241
9	65	80	360	2750	103	100	373	438	398	240	241	240
10	65	80	272	3090	101	101	753	438	399	241	241	240
11	65	80	200	2980	102	101	608	408	398	240	240	239
12	65	80	226	2100	103	101	554	407	398	240	240	238
13	65	79	347	879	104	101	598	438	398	242	239	240
14	65	80	872	668	103	102	1330	466	397	241	239	240
15	65	81	1210	598	102	102	882	464	396	241	239	240
16	65	78	872	555	102	99	457	464	351	241	238	240
17	69	69	967	485	101	100	318	452	301	240	238	240
18	64	69	800	450	100	100	229	480	249	240	238	241
19	64	71	637	412	101	100	164	435	241	240	238	242
20	65	71	597	393	101	101	101	437	240	240	239	241
21	65	72	536	438	103	101	101	449	241	240	241	240
22	65	73	408	417	111	101	101	404	241	241	242	239
23	90	74	356	349	193	101	105	404	240	242	241	239
24	110	72	281	328	358	102	234	404	240	242	240	239
25	111	71	281	337	423	100	228	405	240	242	240	240
26	111	71	270	474	394	99	172	405	240	242	239	239
27	110	71	264	409	281	100	156	406	240	242	239	239
28	109	72	375	365	101	101	102	406	240	242	239	238
29	110	70	463	366	---	101	103	454	240	243	241	240
30	111	70	494	323	---	101	313	509	240	243	241	241
31	110	---	917	127	---	102	---	440	---	242	240	---
TOTAL	2406	2376	13804	27479	4014	3115	8855	14269	9810	7468	7447	7190
MEAN	77.6	79.2	445	886	143	100	295	460	327	241	240	240
MAX	111	110	1210	3090	423	102	1330	613	431	243	242	242
MIN	64	69	72	127	100	99	100	404	240	238	238	238
AC-FT	4770	4710	27380	54500	7960	6180	17560	28300	19460	14810	14770	14260

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2002, BY WATER YEAR (WY)

	328	378	539	669	548	514	418	617	399	234	224	271
MEAN	328	378	539	669	548	514	418	617	399	234	224	271
MAX	506	1033	2374	3542	1685	1481	909	1416	1026	376	389	435
(WY)	1984	1985	1982	1997	1983	1998	1982	1983	1983	1999	1999	1983
MIN	77.6	79.2	121	115	112	100	118	134	69.0	58.1	65.7	65.4
(WY)	2002	2002	1995	1991	2001	2002	1994	2001	2001	2001	2001	2001

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1982 - 2002

ANNUAL TOTAL	44231	108233										
ANNUAL MEAN	121	297								428		
HIGHEST ANNUAL MEAN										829		1983
LOWEST ANNUAL MEAN										127		2001
HIGHEST DAILY MEAN	1210	Dec 15	3090	Jan 10	15500	Jan 2	1997					
LOWEST DAILY MEAN	51	Jul 1	64	Oct 18	51	Jul 1	2001					
ANNUAL SEVEN-DAY MINIMUM	55	Jul 1	65	Oct 7	55	Jul 1	2001					
ANNUAL RUNOFF (AC-FT)	87730		214700		310000							
10 PERCENT EXCEEDS	144		517		869							
50 PERCENT EXCEEDS	99		240		260							
90 PERCENT EXCEEDS	65		73		119							

14362000 APPLGATE RIVER NEAR COPPER, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1973 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: September 1980 to September 1987.

pH: September 1980 to September 1987.

WATER TEMPERATURE: January 1977 to current year.

DISSOLVED OXYGEN: September 1980 to September 1987.

INSTRUMENTATION.--Water-quality monitor since September 1980.

REMARKS.--Record good. Temperatures are affected by releases from Applegate Lake.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 188 microsiemens Sept. 13, 1980; minimum, 61 microsiemens Dec. 3, 1980, Dec. 20, 1981, June 19, 20, 1983.

pH: Maximum, 9.0 units Sept. 4, 1980; minimum recorded, 7.1 units Oct. 8-10, 13, 16, 17, 1986.

WATER TEMPERATURE: Maximum, 26.5°C Aug. 7, 1978; minimum, 0.0°C on many days during winter periods prior to filling of Applegate Lake.

DISSOLVED OXYGEN: Maximum, 15.2 mg/L Feb. 17, 18, 1986; minimum, 4.9 mg/L Sept. 28-30, 1981.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 20.3°C Oct. 1; minimum, 3.9°C Jan. 31, Feb. 11-16.

DAY	WATER TEMPERATURE FROM THE DCP, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002											
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	20.3	17.6	18.4	14.4	13.5	13.8	8.6	7.8	8.2	5.7	5.1	5.5
2	20.0	17.4	18.3	14.4	13.2	13.6	7.9	7.3	7.7	5.9	5.7	5.8
3	19.8	17.4	18.1	14.5	13.0	13.4	7.7	6.4	7.2	6.0	5.8	5.9
4	19.9	17.3	18.1	14.3	12.8	13.2	7.3	7.0	7.1	6.0	5.9	5.9
5	19.6	17.3	18.0	13.1	12.8	12.9	7.5	6.3	7.1	6.1	5.9	6.0
6	19.4	17.3	17.9	13.4	12.3	12.7	6.6	6.3	6.4	5.9	5.7	5.8
7	18.9	17.1	17.7	13.5	12.0	12.4	6.5	6.2	6.3	6.3	5.8	6.0
8	19.2	17.0	17.6	13.3	11.7	12.2	6.4	6.1	6.3	6.1	6.0	6.0
9	18.8	16.7	17.3	13.1	11.6	12.1	6.1	5.9	6.0	6.2	6.0	6.2
10	18.5	16.4	17.1	12.7	11.6	12.0	6.0	5.8	5.9	6.4	6.2	6.3
11	17.7	16.3	16.9	12.5	11.7	12.1	6.1	5.8	5.9	6.4	6.2	6.3
12	18.5	16.0	16.7	12.0	11.7	11.8	6.0	5.8	5.9	6.2	6.0	6.1
13	18.3	15.9	16.6	12.3	11.6	11.8	6.4	5.8	6.1	6.0	5.9	5.9
14	18.2	15.7	16.4	12.4	11.7	11.9	6.4	6.2	6.3	6.0	5.5	5.8
15	18.0	15.6	16.4	12.0	11.6	11.8	6.4	6.1	6.2	5.5	5.2	5.3
16	16.7	15.9	16.1	11.8	11.3	11.6	6.5	6.1	6.3	5.3	5.1	5.2
17	16.6	15.4	15.9	12.2	10.8	11.3	6.4	6.0	6.2	5.2	4.8	5.0
18	17.0	15.1	15.7	11.7	10.7	11.0	6.3	5.9	6.1	4.8	4.5	4.7
19	17.2	14.9	15.6	11.7	10.7	11.1	6.1	5.9	6.0	4.7	4.5	4.6
20	16.9	14.9	15.5	11.3	10.8	10.9	6.1	5.8	5.9	5.2	4.4	4.8
21	16.9	14.8	15.3	10.8	10.4	10.6	5.9	5.7	5.8	5.1	4.7	4.8
22	15.8	14.9	15.2	10.7	9.2	10.1	6.0	5.7	5.9	4.9	4.6	4.8
23	15.9	14.7	15.0	9.5	9.0	9.2	5.8	5.5	5.7	4.8	4.5	4.6
24	15.5	14.4	14.7	9.0	8.4	8.8	5.5	5.2	5.4	4.6	4.4	4.5
25	15.5	14.1	14.5	9.1	8.5	8.7	5.4	5.1	5.2	5.1	4.5	4.9
26	15.3	13.9	14.3	9.0	8.2	8.6	5.1	5.0	5.0	5.0	4.5	4.8
27	14.6	13.9	14.1	8.8	8.2	8.4	5.1	4.9	5.0	4.7	4.5	4.6
28	14.8	13.8	14.0	8.7	8.0	8.4	5.1	4.8	5.0	4.7	4.4	4.5
29	14.5	13.8	13.9	8.9	8.0	8.4	5.2	5.0	5.1	4.5	4.3	4.4
30	14.4	13.7	13.9	8.4	7.8	8.0	5.4	5.2	5.2	4.5	4.2	4.3
31	14.6	13.7	13.9	---	---	---	5.5	5.3	5.4	4.5	3.9	4.2
MONTH	20.3	13.7	16.1	14.5	7.8	11.1	8.6	4.8	6.1	6.4	3.9	5.3

14362250 STAR GULCH NEAR RUCH, OR

LOCATION.--Lat 42°09'15", long 123°04'27", in NE 1/4 NE 1/4 sec.29, T.39 S., R.3 W., Jackson County, Hydrologic Unit 17100309, Bureau of Land Management land, on left bank 1.0 mi downstream from Benson Gulch, 6.0 mi southwest of Ruch, and at mile 1.1.

DRAINAGE AREA.--16.0 mi².

PERIOD OF RECORD.--July 1983 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,667.04 ft above NGVD of 1929.

REMARKS.--No estimated daily discharges. Records fair.

AVERAGE DISCHARGE.--19 years (water years 1984-2002), 5.05 ft³/s, 3,660 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,050 ft³/s Jan. 1, 1997, gage height, 5.43 ft; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 40 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	0130	*65	*2.24	No other peak greater than base discharge.			
Minimum discharge, no flow ft ³ /s many days in October, July, August, and September.							

DISCHARGE, in CFS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.12	0.90	7.2	7.8	4.4	3.7	3.1	3.6	0.98	0.15	0.00	0.00
2	0.0	0.89	8.2	8.2	4.2	3.6	3.0	3.1	0.97	0.11	0.00	0.00
3	0.00	0.89	8.8	8.3	3.9	3.3	2.8	2.8	0.95	0.06	0.00	0.00
4	0.00	0.89	5.4	7.2	3.7	3.2	2.8	2.5	0.91	0.05	0.00	0.00
5	0.00	0.92	5.4	6.4	3.6	3.2	2.6	2.4	0.89	0.05	0.00	0.00
6	0.00	0.97	7.6	15	3.4	3.2	2.6	2.3	0.84	0.02	0.00	0.00
7	0.00	1.0	5.5	24	8.3	3.3	2.6	2.2	0.83	0.00	0.00	0.00
8	0.00	1.1	3.8	19	29	3.1	2.5	2.2	0.85	0.00	0.00	0.00
9	0.05	1.1	3.0	18	21	3.1	2.5	2.1	0.89	0.00	0.00	0.00
10	0.17	1.1	2.6	14	15	3.2	2.4	2.0	0.85	0.00	0.00	0.00
11	0.28	1.1	2.4	10	11	3.2	2.3	1.9	0.77	0.00	0.00	0.00
12	0.37	1.4	2.1	8.0	9.2	3.3	2.3	1.9	0.67	0.00	0.00	0.00
13	0.40	1.4	6.3	6.6	7.9	3.5	2.2	1.8	0.59	0.00	0.00	0.00
14	0.41	1.3	38	5.7	6.8	3.6	2.3	1.7	0.50	0.00	0.00	0.00
15	0.40	1.2	13	5.1	6.0	3.6	2.4	1.7	0.45	0.00	0.00	0.00
16	0.36	2.1	7.6	4.5	5.5	3.7	2.4	1.6	0.42	0.00	0.00	0.00
17	0.32	2.1	24	4.2	5.2	3.6	2.3	1.6	0.46	0.00	0.00	0.00
18	0.35	1.5	17	3.8	4.8	3.5	2.3	1.6	0.59	0.00	0.00	0.00
19	0.41	1.4	15	3.8	4.6	3.4	2.2	1.6	0.54	0.00	0.00	0.00
20	0.44	1.6	13	3.6	5.2	3.7	2.2	1.8	0.47	0.00	0.00	0.00
21	0.46	2.7	9.7	5.0	5.4	4.1	2.2	1.8	0.39	0.00	0.00	0.00
22	0.45	4.4	7.8	6.0	5.5	4.5	2.1	1.7	0.36	0.00	0.00	0.00
23	0.51	2.3	6.4	5.5	5.5	4.8	2.0	1.6	0.32	0.00	0.00	0.00
24	0.58	2.0	5.5	5.0	4.9	4.7	1.9	1.4	0.30	0.00	0.00	0.00
25	0.67	2.5	4.9	5.1	4.5	4.5	1.9	1.4	0.26	0.00	0.00	0.00
26	0.74	2.2	4.4	6.4	4.3	4.3	1.9	1.4	0.18	0.00	0.00	0.00
27	0.75	1.7	4.1	6.7	4.1	4.1	2.1	1.3	0.11	0.00	0.00	0.00
28	0.76	6.1	4.2	6.2	3.8	3.8	2.0	1.3	0.09	0.00	0.00	0.00
29	0.80	6.6	6.0	5.5	---	3.6	1.9	1.2	0.11	0.00	0.00	0.00
30	0.87	3.6	7.1	4.9	---	3.3	4.1	1.1	0.16	0.00	0.00	0.00
31	0.90	---	7.8	4.6	---	3.2	---	1.0	---	0.00	0.00	---
TOTAL	11.57	58.96	263.8	244.1	200.7	112.9	71.9	57.6	16.70	0.44	0.00	0.00
MEAN	0.373	1.965	8.510	7.874	7.168	3.642	2.397	1.858	0.557	0.014	0.000	0.000
MAX	0.90	6.6	38	24	29	4.8	4.1	3.6	0.98	0.15	0.00	0.00
MIN	0.00	0.89	2.1	3.6	3.4	3.1	1.9	1.0	0.09	0.00	0.00	0.00
AC-FT	23	117	523	484	398	224	143	114	33	0.9	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2002, BY WATER YEAR (WY)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	0.837	3.117	7.849	12.21	12.35	11.07	6.618	3.353	1.846	0.871	0.457	0.406							
MAX	1.98	18.0	50.7	75.3	49.3	34.0	19.6	9.08	6.07	3.11	1.61	1.09							
(WY)	1984	1985	1997	1997	1999	1999	1995	1998	1998	1998	1998	1998							
MIN	0.021	0.23	0.87	1.13	1.30	0.95	1.00	0.22	0.012	0.000	0.000	0.000							
(WY)	1993	1993	1990	1992	2001	1992	1994	1992	1994	1994	1988	1991							

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1984 - 2002
ANNUAL TOTAL	506.39	1038.67	
ANNUAL MEAN	1.387	2.846	5.050
HIGHEST ANNUAL MEAN			15.1 1997
LOWEST ANNUAL MEAN			0.60 1992
HIGHEST DAILY MEAN	38 Dec 14	38 Dec 14	621 Jan 1 1997
LOWEST DAILY MEAN	0.00 Jun 21	0.00 Oct 2	0.00 Jul 16 1987
ANNUAL SEVEN-DAY MINIMUM	0.00 Jul 4	0.00 Oct 2	0.00 Aug 20 1987
ANNUAL RUNOFF (AC-FT)	1000	2060	3660
10 PERCENT EXCEEDS	2.3	6.6	12
50 PERCENT EXCEEDS	0.84	1.6	1.5
90 PERCENT EXCEEDS	0.00	0.00	0.05

14366000 APPLGATE RIVER NEAR APPLGATE, OR

LOCATION.--Lat 42°14'30", long 123°08'20", in NE 1/4 sec.26, T.38 S., R.4 W., Jackson County, Hydrologic Unit 17100309, on left bank 0.9 mi downstream from Keeler Creek, 1.8 mi southeast of Applegate, and at mile 26.7.

DRAINAGE AREA.--483 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to current year.

RECORDS.--WSP 1738: Drainage area. WSP 1935: 1953(M). WDR OR-76-1: 1956(M), 1965(M).

GAGE.--Water-stage recorder. Datum of gage is 1,285.33 ft above NGVD of 1929. Prior to Dec. 23, 1938, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow regulated since December 1980 by Applegate Lake (station 14361900). Many diversions for irrigation upstream from station. McDonald Creek Canal diverts from McDonald Creek upstream from station for irrigation in Bear Creek basin. Thompson Creek Irrigation Association ditch diverts upstream from station for irrigation in Thompson Creek basin. Fowler-Keeler and Berryman ditches divert upstream from station for irrigation downstream. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--42 years (water years 1939-80), 548 ft³/s, 397,000 acre-ft/yr.
22 years (water years 1981-2002), 517 ft³/s, 374,900 acre-ft/yr, regulated.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,200 ft³/s Jan. 15, 1974, gage height, 20.41 ft, from rating curve extended above 18,000 ft³/s on basis of slope-area measurements of flow at gage heights 18.00 ft and 19.57 ft; minimum discharge, 4.6 ft³/s Sept. 22-25, 1979. Minimum since first filling of Applegate Lake, 22 ft³/s July 24, 2001.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 20, 1927, reached a stage of 18.7 ft, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,260 ft³/s Jan. 9, gage height, 5.29 ft; minimum discharge, 42 ft³/s Oct. 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	127	e240	945	182	183	171	657	525	240	210	214
2	44	126	e340	1380	174	178	177	729	513	237	211	211
3	47	106	e340	1440	172	174	182	673	480	235	209	211
4	48	102	285	1190	169	171	189	664	472	236	211	210
5	49	106	298	848	167	168	205	662	469	238	211	213
6	50	106	451	1010	165	169	201	644	463	236	214	212
7	51	106	450	1410	191	175	195	624	457	236	213	214
8	50	97	431	1580	308	167	253	569	448	233	213	218
9	49	96	427	2730	261	167	343	542	441	226	212	215
10	47	97	377	3140	238	167	884	530	432	228	213	215
11	51	97	255	3030	223	166	755	496	426	230	214	215
12	58	103	261	2440	212	171	697	480	421	223	210	216
13	56	105	349	1100	206	170	686	507	419	222	209	218
14	55	99	1120	835	200	168	1400	555	417	227	206	219
15	56	97	1370	721	193	168	1260	547	416	223	207	220
16	58	113	1110	684	188	169	638	556	388	226	208	221
17	60	106	1140	605	185	167	457	536	343	219	207	223
18	59	93	1030	544	181	164	357	573	290	216	206	223
19	57	91	830	513	182	166	290	525	268	218	206	224
20	56	98	765	470	203	167	176	518	260	219	207	223
21	57	116	706	532	213	173	171	559	256	219	211	224
22	60	145	541	543	216	181	173	490	261	220	212	220
23	69	114	475	446	296	186	172	481	256	215	213	220
24	107	112	388	423	428	194	224	476	253	208	212	220
25	103	e110	372	407	528	188	376	474	248	211	212	221
26	99	e110	360	565	525	181	200	477	242	211	209	222
27	102	e110	337	516	418	177	252	478	234	211	210	223
28	104	e200	429	456	212	176	158	491	237	211	210	223
29	105	e350	558	442	---	175	159	530	238	208	210	225
30	114	e200	602	413	---	174	363	633	238	209	216	226
31	125	---	984	269	---	171	---	535	---	210	215	---
TOTAL	2091	3638	17621	31627	6836	5371	11764	17211	10811	6901	6527	6559
MEAN	67.5	121	568	1020	244	173	392	555	360	223	211	219
MAX	125	350	1370	3140	528	194	1400	729	525	240	216	226
MIN	44	91	240	269	165	164	158	474	234	208	206	210
AC-FT	4150	7220	34950	62730	13560	10650	23330	34140	21440	13690	12950	13010

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2002, BY WATER YEAR (WY)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	
MEAN	318	418	707	862	778	707	566	735	453	227	200	251											
MAX	507	1261	3077	4904	2552	1892	1304	1705	1237	441	413	425											
(WY)	1983	1985	1982	1997	1983	1995	1982	1983	1983	1998	1999	1983											
MIN	51.6	97.8	149	133	141	142	139	155	48.2	35.2	36.9	43.7											
(WY)	1981	1981	1995	2001	2001	1992	1992	2001	2001	2001	2001	2001											

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1981 - 2002

ANNUAL TOTAL	52228	126957	
ANNUAL MEAN	143	348	517
HIGHEST ANNUAL MEAN			1072
LOWEST ANNUAL MEAN			139
HIGHEST DAILY MEAN	1370	3140	24400
LOWEST DAILY MEAN	27	44	17
ANNUAL SEVEN-DAY MINIMUM	31	48	21
ANNUAL RUNOFF (AC-FT)	103600	251800	374900
10 PERCENT EXCEEDS	221	649	1120
50 PERCENT EXCEEDS	125	219	273
90 PERCENT EXCEEDS	36	103	136

e Estimated

14366000 APPLEGATE RIVER NEAR APPLEGATE, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: August 1973 to current year.

INSTRUMENTATION.--Temperature recorder since August 1973.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 28.0°C July 29, 30, Aug. 3, 4, 1974; minimum, 0.0°C on several days during winter periods most years. Maximum since full operation of Applegate Lake, 25.5°C July 5, 1984, July 16, 19, 27, 1992; minimum, 0.0°C on several days during winter periods most years.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 23.9°C July 11; minimum, 2.2°C Jan. 30.

DAY	WATER TEMPERATURE FROM THE DCP, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002											
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	18.9	15.1	17.1	13.5	11.5	12.6	---	---	---	6.6	5.9	6.2
2	18.9	15.6	17.4	13.5	11.4	12.4	---	---	---	7.1	5.8	6.4
3	18.3	15.1	16.9	12.3	9.8	11.2	---	---	---	6.5	5.6	5.9
4	18.1	14.8	16.6	11.6	8.8	10.4	6.9	5.8	6.4	6.5	5.5	5.9
5	17.4	14.4	16.1	11.1	9.9	10.5	7.6	6.6	7.1	7.1	5.7	6.4
6	17.0	14.6	15.9	12.0	10.1	11.1	7.6	6.6	7.4	7.5	6.6	6.9
7	15.9	13.4	14.9	10.1	7.5	8.9	6.8	5.2	6.1	7.3	6.5	6.9
8	16.4	14.2	15.3	9.4	6.5	8.1	6.8	5.2	6.1	7.3	6.6	6.9
9	15.2	12.5	14.0	9.5	6.7	8.2	6.8	5.4	6.3	6.9	6.3	6.6
10	14.5	11.7	13.2	10.2	7.3	8.8	6.2	4.9	5.6	6.9	6.1	6.5
11	15.8	14.2	14.9	11.9	9.4	10.6	6.6	5.5	6.1	6.8	6.3	6.5
12	15.0	12.1	13.7	11.5	10.9	11.1	6.5	5.9	6.2	7.0	5.7	6.4
13	15.3	12.2	13.9	11.0	9.9	10.5	7.1	6.1	6.6	6.5	5.3	5.8
14	15.1	12.2	13.8	12.3	10.8	11.4	7.0	6.1	6.4	6.2	5.3	5.7
15	15.1	12.4	13.9	11.7	10.4	11.1	6.8	6.1	6.4	6.0	4.5	5.2
16	15.1	13.6	14.4	11.8	11.1	11.6	7.4	6.2	6.8	5.2	3.6	4.4
17	14.8	12.9	13.9	11.2	9.6	10.7	7.2	6.1	6.7	5.9	4.3	4.8
18	13.5	10.9	12.3	10.1	8.1	9.2	6.7	5.8	6.2	5.5	3.6	4.5
19	13.5	10.5	12.1	11.5	9.8	10.5	7.2	6.3	6.6	5.1	3.9	4.4
20	14.1	11.6	13.0	10.4	9.2	9.6	6.5	6.0	6.3	5.9	4.0	4.9
21	13.7	11.6	12.9	9.5	9.1	9.3	6.5	5.5	6.0	5.6	4.7	5.3
22	14.1	12.6	13.4	9.5	8.9	9.3	7.0	5.1	5.9	5.5	4.0	4.7
23	13.8	12.7	13.3	8.9	7.6	8.2	6.5	5.3	5.8	6.2	4.1	4.9
24	12.7	10.1	11.4	8.1	6.2	7.2	5.7	4.2	5.1	5.2	3.4	4.3
25	12.4	9.2	10.7	7.5	6.1	6.7	6.1	4.3	5.2	6.1	4.2	5.2
26	13.1	9.8	11.4	---	---	---	6.3	5.1	5.7	5.8	4.4	5.2
27	12.6	10.6	11.7	---	---	---	6.7	5.4	6.0	5.0	3.4	4.2
28	13.4	11.7	12.5	---	---	---	6.3	4.9	5.7	4.9	3.0	3.9
29	13.4	11.6	12.6	---	---	---	6.9	5.8	6.2	5.1	3.1	3.9
30	13.9	12.7	13.2	---	---	---	6.3	5.7	6.1	4.6	2.2	3.4
31	14.1	12.2	13.1	---	---	---	6.6	5.8	6.1	4.3	2.3	3.4
MONTH	18.9	9.2	13.9	---	---	---	---	---	---	7.5	2.2	5.3

ROGUE RIVER BASIN

14366000 APPLEGATE RIVER NEAR APPLEGATE, OR--Continued

WATER TEMPERATURE FROM THE DCP, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	5.9	3.6	4.4	7.1	2.9	4.9	13.2	7.1	10.0	12.3	7.7	9.7
2	5.4	3.5	4.2	7.5	2.8	5.0	14.4	8.1	11.0	13.2	7.9	10.2
3	6.7	3.7	4.8	8.2	3.4	5.6	14.7	8.6	11.5	12.9	8.0	10.1
4	5.9	2.9	4.3	8.9	4.2	6.3	14.9	8.9	11.7	13.2	7.2	10.0
5	5.2	2.6	3.8	6.6	4.8	5.7	12.3	9.6	11.0	13.3	7.6	10.3
6	5.8	3.3	4.6	8.2	5.4	6.8	12.3	9.3	10.7	12.8	8.1	10.3
7	6.2	5.2	5.7	7.6	5.4	6.5	14.0	7.7	10.6	12.6	7.4	9.8
8	6.4	4.2	5.0	8.0	4.0	5.7	12.2	8.0	10.2	13.1	6.7	9.8
9	6.1	3.2	4.5	7.0	4.3	5.5	11.3	8.5	10.2	13.4	7.4	10.2
10	6.8	3.5	5.0	8.0	4.3	6.1	10.6	7.1	8.5	12.5	8.0	10.0
11	6.8	4.2	5.3	10.1	6.4	8.1	10.6	7.6	8.9	14.3	7.4	10.8
12	7.2	3.8	5.3	8.9	6.6	7.9	11.1	6.8	8.9	15.2	8.4	11.8
13	8.1	5.2	6.3	7.5	5.4	6.4	9.8	7.4	8.6	13.7	9.9	11.6
14	7.1	3.9	5.5	8.2	4.9	6.4	8.7	6.1	7.6	14.5	8.4	11.3
15	6.8	3.6	5.2	8.1	5.5	6.6	8.4	5.8	7.0	14.1	8.5	11.3
16	7.9	5.0	6.2	7.5	4.9	6.0	8.6	6.0	7.3	15.3	8.5	11.7
17	6.9	5.3	6.0	7.2	4.7	5.8	9.3	5.9	7.5	15.8	10.0	12.8
18	7.3	5.3	6.3	7.9	3.8	6.0	9.8	6.2	7.8	13.8	10.0	11.8
19	7.2	6.0	6.6	10.3	5.2	7.6	11.6	6.0	8.8	12.4	10.1	11.1
20	8.5	6.4	7.3	10.4	6.0	8.1	13.1	7.2	10.1	12.6	10.0	11.3
21	8.8	6.8	7.7	11.1	6.3	8.6	14.0	7.6	10.7	13.0	9.9	11.2
22	9.6	6.6	7.9	8.8	6.6	7.8	15.0	8.5	11.6	15.0	9.6	12.1
23	8.2	6.7	7.5	9.4	7.1	8.1	15.4	9.3	12.2	16.0	9.0	12.5
24	8.2	5.8	6.7	11.4	6.7	8.8	14.8	8.6	11.7	17.0	9.7	13.4
25	7.1	3.5	5.3	10.8	6.3	8.4	14.1	8.1	11.3	16.1	11.0	13.6
26	7.5	3.8	5.5	11.4	5.8	8.4	14.1	9.5	11.5	16.7	11.1	13.9
27	7.6	3.6	5.6	12.3	6.9	9.3	11.5	8.8	10.3	13.9	11.8	13.0
28	7.4	3.7	5.5	12.0	6.6	9.2	13.6	8.0	10.6	15.2	12.2	13.7
29	---	---	---	12.6	6.9	9.5	13.2	8.6	10.8	17.5	13.2	15.1
30	---	---	---	12.6	6.8	9.5	10.6	8.2	9.1	16.8	12.4	14.5
31	---	---	---	12.9	6.8	9.7	---	---	---	17.0	11.3	14.2
MONTH	9.6	2.6	5.6	12.9	2.8	7.2	15.4	5.8	9.9	17.5	6.7	11.7
	JUNE			JULY			AUGUST			SEPTEMBER		
1	17.5	11.9	14.5	21.8	15.6	18.8	19.9	15.6	17.8	19.7	14.7	17.2
2	17.9	11.7	14.7	21.9	15.2	18.6	19.4	15.5	17.4	20.3	15.4	17.8
3	17.4	11.2	14.2	21.4	16.1	18.7	18.4	14.4	16.5	19.7	15.6	17.7
4	18.7	11.8	15.2	21.0	15.2	18.1	18.6	14.8	16.3	18.0	14.3	16.2
5	19.3	12.7	16.0	21.6	15.1	18.3	17.2	13.9	15.6	18.0	13.3	15.6
6	18.3	12.7	15.4	21.9	16.0	19.0	20.0	14.1	16.8	16.7	13.8	15.2
7	17.0	11.4	14.2	21.1	16.6	18.7	19.6	14.2	16.9	17.9	12.9	15.1
8	14.7	10.6	12.8	21.8	15.6	18.6	19.7	14.5	17.1	17.6	13.0	15.3
9	17.1	10.9	13.6	22.6	15.3	18.9	20.8	15.2	17.9	18.4	13.4	15.9
10	18.3	11.2	14.8	23.5	17.0	20.2	20.5	15.8	18.2	18.9	14.0	16.4
11	19.4	12.2	15.8	23.9	17.9	20.9	20.9	15.9	18.3	19.3	14.5	16.9
12	19.8	12.9	16.3	22.7	17.9	20.4	21.3	15.6	18.5	19.5	14.9	17.2
13	19.7	13.3	16.6	23.8	18.2	20.8	21.8	16.3	19.0	19.7	15.2	17.5
14	19.3	12.7	16.1	21.5	17.1	19.4	22.1	16.8	19.4	17.6	14.8	16.4
15	19.6	12.7	16.1	22.3	16.5	19.3	21.7	16.4	19.0	18.4	14.6	16.5
16	18.8	12.6	15.7	22.5	17.0	19.6	21.4	15.9	18.7	18.0	14.9	16.5
17	16.1	12.8	14.2	22.2	17.2	19.7	21.0	15.9	18.5	16.8	15.6	16.3
18	19.9	14.2	16.6	22.5	17.1	19.8	20.0	15.2	17.6	19.3	15.0	16.8
19	19.2	12.8	16.0	22.4	17.3	19.8	20.2	15.1	17.6	18.6	14.1	16.3
20	19.3	13.1	16.3	22.4	16.1	19.3	20.0	15.5	17.7	18.3	14.0	16.2
21	20.6	14.3	17.5	22.8	16.8	19.9	20.1	14.9	17.4	18.3	13.7	16.0
22	20.9	14.9	18.0	20.6	17.5	19.1	19.9	14.7	17.3	18.5	14.0	16.2
23	20.5	15.1	17.8	22.9	17.1	19.8	20.2	15.6	17.9	18.5	14.1	16.3
24	21.3	15.0	18.2	22.2	17.2	19.7	20.4	15.8	18.1	18.0	13.8	15.9
25	22.1	15.3	18.7	22.0	16.7	19.4	20.2	15.9	18.1	17.6	13.3	15.5
26	22.6	16.7	19.7	22.3	16.7	19.5	20.1	15.7	17.8	16.7	12.9	14.9
27	21.6	16.6	19.2	21.6	16.9	19.2	20.2	15.1	17.7	16.8	12.9	14.9
28	19.7	16.4	18.3	20.8	15.7	18.3	21.0	16.0	18.4	16.9	12.8	14.8
29	22.4	16.9	19.3	21.5	16.6	19.0	20.2	16.3	18.3	14.8	12.9	13.7
30	21.5	15.8	18.7	22.2	17.0	19.5	19.8	16.0	17.8	15.1	11.4	13.2
31	---	---	---	21.3	17.1	19.1	19.3	14.3	16.9	---	---	---
MONTH	22.6	10.6	16.4	23.9	15.1	19.3	22.1	13.9	17.8	20.3	11.4	16.0

14369500 APPLGATE RIVER NEAR WILDERVILLE, OR

LOCATION.--Lat 42°21'15", long 123°24'20", in SE 1/4 NE 1/4 sec.16, T.37 S., R.6 W., Josephine County, Hydrologic Unit 17100309, on left bank 0.3 mi downstream from Jackson Creek, 3.6 mi southeast of Wilderville, and at mile 7.6.

DRAINAGE AREA.--698 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to September 1955, September 1978 to current year.

REVISED RECORDS.--WSP 1318: 1943. WSP 1738: 1951, 1953, drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 947.18 ft above NGVD of 1929 (Corps of Engineers bench mark). Prior to Sept. 1, 1978, nonrecording gage at site 1,100 ft upstream at datum 2.36 ft higher.

REMARKS.--Records good. Flow regulated since December 1980 by Applegate Lake (station 14361900). Many diversions for irrigation upstream from station. Wilderville ditch diverts up to 16 ft³/s 0.3 mi upstream and at the mouth of Jackson Creek. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--19 years (water years 1939-55, 1979, 1980), 717 ft³/s, 519,500 acre-ft/yr.
22 years (water years 1981-2002), 712 ft³/s, 516,000 acre-ft/yr, regulated period.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47,500 ft³/s Jan. 18, 1953, gage height, 18.3 ft, from floodmark, site and datum then in use, from rating curve extended above 12,000 ft³/s on basis of slope-area measurement of peak flow; minimum discharge, 0.78 ft³/s Aug. 22-24, 1979. Minimum since first filling of Applegate Lake, 7.0 ft³/s July 26-28, Aug. 11, 12, 2001.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 22, 1955, reached a stage of 20.3 ft, from floodmark, former site and datum, discharge, 66,500 ft³/s, from rating curve extended above 12,000 ft³/s on basis of slope-area measurement of peak flow.

Flood of February 1927 reached a stage of 22 ft at former site, from local resident. Floods of Dec. 22, 1964, and Jan. 15, 1974, are known to have exceeded the December 1955 flood.

No flow was observed at present site during the late summer of 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,580 ft³/s Jan. 9, gage height, 6.03 ft; minimum discharge, 44.0 ft³/s Oct. 3, 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e50	155	418	1180	428	404	305	647	504	208	181	201
2	48	153	596	1420	398	378	303	721	501	203	183	201
3	45	147	593	1650	392	359	307	719	475	201	182	191
4	58	131	499	1470	386	342	309	688	460	200	186	189
5	58	129	707	1130	374	342	319	679	450	204	189	193
6	60	130	954	2050	364	343	319	672	452	203	187	196
7	63	130	794	2160	669	435	307	633	449	205	189	207
8	66	129	661	2510	1320	408	324	591	442	214	197	211
9	66	122	601	2920	933	389	349	547	429	208	198	216
10	66	122	557	3370	750	401	828	532	419	192	193	212
11	70	121	412	3200	629	424	821	511	406	187	189	193
12	73	129	372	2860	560	561	771	483	394	188	192	194
13	69	130	505	1550	512	619	716	483	388	189	184	194
14	67	128	2060	1150	474	558	1150	536	381	190	182	199
15	73	125	1680	963	443	517	1500	528	379	190	176	203
16	77	148	1510	911	420	494	810	544	369	190	179	203
17	78	157	1570	809	402	459	642	513	348	190	180	205
18	80	134	1600	730	385	426	517	523	303	195	184	210
19	81	125	1470	704	423	403	431	533	251	198	193	216
20	83	129	1240	636	728	394	340	528	236	195	193	217
21	85	166	1070	830	697	401	290	555	228	188	182	218
22	85	256	883	906	620	411	281	513	227	181	187	213
23	90	225	772	753	674	419	272	490	227	180	185	212
24	102	185	642	671	734	414	262	481	225	174	185	205
25	123	201	564	753	820	397	423	473	218	177	185	203
26	125	193	530	1280	808	376	287	478	212	179	185	204
27	134	167	491	1070	691	359	321	484	213	177	185	205
28	129	334	518	882	523	346	259	494	216	184	187	208
29	128	625	678	784	---	334	226	484	215	191	193	212
30	136	332	748	706	---	324	295	583	206	192	194	222
31	144	---	1000	594	---	315	---	522	---	182	202	---
TOTAL	2612	5358	26695	42602	16557	12752	14284	17168	10223	5955	5807	6153
MEAN	84.3	179	861	1374	591	411	476	554	341	192	187	205
MAX	144	625	2060	3370	1320	619	1500	721	504	214	202	222
MIN	45	121	372	594	364	315	226	473	206	174	176	189
AC-FT	5180	10630	52950	84500	32840	25290	28330	34050	20280	11810	11520	12200

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2002, BY WATER YEAR (WY)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	
MEAN	347	589	1126	1356	1315	1090	824	809	480	215	179	246											
MAX	569	2099	4769	6633	4241	2715	2177	1916	1333	439	393	482											
(WY)	1984	1985	1997	1997	1983	1983	1982	1983	1983	1998	1999	1983											
MIN	80.4	156	196	187	190	209	173	147	32.9	17.2	17.9	34.5											
(WY)	1981	1981	1991	2001	2001	2001	1994	2001	2001	2001	2001	2001											

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1981 - 2002

ANNUAL TOTAL	66844.8	166166																					
ANNUAL MEAN	183	455																					
HIGHEST ANNUAL MEAN										1546		1983											
LOWEST ANNUAL MEAN										160		2001											
HIGHEST DAILY MEAN				2060		Dec 14		3370		Jan 10		36500		Jan 1	1997								
LOWEST DAILY MEAN				7.7		Jul 27		45		Oct 3		7.7		Jul 27	2001								
ANNUAL SEVEN-DAY MINIMUM				9.9		Jul 5		55		Oct 1		9.9		Jul 5	2001								
ANNUAL RUNOFF (AC-FT)				132600				329600				516000											
10 PERCENT EXCEEDS				254				829				1590											
50 PERCENT EXCEEDS				144				332				344											
90 PERCENT EXCEEDS				18				129				139											

e Estimated

14369500 APPLGATE RIVER NEAR WILDERVILLE, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: September 1978 to current year.

INSTRUMENTATION.--Temperature recorder since September 1978.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 29.0°C June 22, 1992; minimum, 0.0°C Feb. 6, 7, 1989.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 26.6°C July 11; minimum, 3.5°C Jan. 30.

WATER TEMPERATURE in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	19.6	16.5	18.2	13.9	13.0	13.5	8.5	8.2	8.4	7.7	7.0	7.3
2	19.7	17.0	18.5	14.0	12.5	13.1	8.2	7.6	7.8	7.9	7.3	7.7
3	19.3	16.6	18.1	13.0	11.5	12.2	8.0	7.4	7.7	7.3	6.2	6.6
4	18.9	16.5	17.8	12.4	10.9	11.4	7.6	7.0	7.3	6.8	5.6	6.2
5	18.6	16.2	17.4	12.0	10.9	11.5	8.3	7.3	7.7	7.8	6.4	6.9
6	18.2	16.3	17.3	12.8	10.8	11.8	9.1	8.0	8.6	8.9	7.8	8.3
7	17.7	15.2	16.3	10.8	9.1	10	8.0	6.6	7.1	8.7	8.0	8.3
8	16.8	15.5	16.1	10.1	8.3	9.0	7.0	6.6	6.9	8.9	8.0	8.5
9	15.9	13.6	14.8	9.7	8.0	8.8	7.5	6.8	7.1	8.0	7.1	7.7
10	15.5	13.1	14.2	10.2	8.2	9.1	6.8	5.9	6.4	7.4	6.5	7.0
11	16.5	15.2	15.7	11.4	9.6	10.5	7.8	6.6	7.1	7.2	6.5	6.9
12	16.4	13.5	14.9	11.9	11.0	11.4	7.7	7.2	7.5	7.8	6.7	7.1
13	16.6	13.4	15.0	11.6	11.1	11.4	8.1	7.3	7.6	7.2	5.6	6.5
14	16.6	13.3	15.0	12.6	11.2	11.8	7.9	6.8	7.2	6.5	5.9	6.2
15	16.3	13.5	14.9	12.0	11.4	11.7	7.2	6.4	6.8	6.0	5.2	5.6
16	16.2	14.3	15.3	12.2	11.3	11.9	8.1	7.0	7.5	5.3	4.1	4.7
17	15.8	13.8	14.7	11.8	10.6	11.1	8.1	7.3	7.7	5.8	4.9	5.2
18	14.9	12.0	13.4	10.9	9.8	10.3	7.3	6.3	6.7	5.6	5.0	5.4
19	14.8	11.6	13.1	11.5	10.3	10.9	7.7	7.1	7.4	5.8	5.0	5.4
20	15.7	12.7	14.1	10.8	10.2	10.4	7.6	7.1	7.3	6.8	5.0	5.8
21	15.4	12.7	14.1	10.3	10.0	10.1	7.2	6.7	7.1	6.7	5.8	6.4
22	15.8	13.6	14.7	10.6	9.6	10.1	7.4	6.1	6.7	6.0	5.0	5.5
23	15.4	13.8	14.5	10.6	9.3	9.7	7.3	6.7	7.1	6.5	5.1	5.8
24	13.8	11.3	12.5	9.3	8.4	9.0	6.7	5.9	6.2	6.1	4.9	5.5
25	13.0	10.4	11.5	9.1	8.1	8.6	6.6	5.7	6.2	6.8	5.4	6.0
26	13.5	10.6	11.7	8.9	8.2	8.6	7.0	6.1	6.6	6.7	5.7	6.4
27	13.0	11.0	12.0	8.4	7.9	8.2	7.4	6.5	6.9	5.7	4.7	5.2
28	12.9	12.2	12.6	8.2	7.3	7.7	7.3	6.4	6.9	5.6	4.8	5.2
29	13.6	12.6	13.0	8.8	7.9	8.3	8.2	7.0	7.5	5.9	4.3	4.9
30	14.2	13.1	13.6	8.5	7.9	8.3	7.8	7.0	7.4	5.0	3.5	4.3
31	14.3	13.0	13.6	---	---	---	8.0	7.3	7.5	5.1	3.6	4.3
MONTH	19.7	10.4	14.8	14.0	7.3	10.3	9.1	5.7	7.2	8.9	3.5	6.2

14372300 ROGUE RIVER NEAR AGNESS, OR

LOCATION.--Lat 42°34'50", long 124°03'30", in NE 1/4 NW 1/4 sec.6, T.35 S., R.11 W., Curry County, Hydrologic Unit 17100310, on left bank 0.8 mi upstream from Shasta Costa Creek, 1.5 mi north of Agness, 2.6 mi upstream from Illinois River, and at mile 29.7.

DRAINAGE AREA.--3,939 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 113.81 ft above NGVD of 1929 (levels by U.S. Bureau of Public Roads).

REMARKS.--Records good. Flow regulated since February 1977 by Lost Creek Lake (station 14335040), since December 1980 by Applegate Lake (station 14361900), slight regulation by Fish Lake and Emigrant Lake. Many diversions for irrigation and mining. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--17 years, (water years 1961-77), 6,326 ft³/s, 4,583,000 acre-ft/yr.
25 years (water years 1978-2002), 5,473 ft³/s, 3,965,000 acre-ft/yr (since operation began at Lost Creek Lake).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 290,000 ft³/s Dec. 23, 1964, from slope-area measurement; maximum gage height, 68.03 ft Dec. 23, 1964, from floodmark (backwater from Illinois River); minimum discharge, 608 ft³/s July 9, 10, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 26,800 ft³/s Dec. 14, gage height, 11.69 ft; minimum discharge, 837 ft³/s Oct. 15.

DISCHARGE, in CFS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1350	1300	7440	9440	5420	4280	4220	4580	3520	1910	1760	2140
2	1350	1220	10100	9300	5100	3950	4240	4420	3500	1900	1760	2160
3	1220	1170	9610	10500	5230	3720	4280	4490	3490	1870	1780	2150
4	1080	1130	7160	9080	5030	3510	4560	4150	3730	1850	1810	2130
5	1080	1110	9730	7550	4780	3380	4830	3980	e3750	1880	1850	2130
6	1090	1100	12800	16800	4620	3510	5230	4070	e3730	1890	1870	2140
7	1050	1100	9890	19300	7860	3770	5050	4000	e3730	1860	1870	2260
8	1050	1090	7010	21600	17800	4130	4660	3880	e3740	1850	2000	2390
9	1060	1090	5600	17700	13600	3830	4630	3550	3750	1850	2150	2380
10	1220	1080	4980	13600	9940	3930	4690	3410	3770	1780	2130	2330
11	1450	1080	4670	11800	7920	4520	e5250	3380	3700	1740	2120	2300
12	1030	1170	4400	10900	6810	6160	e5400	3220	3610	1730	2130	2270
13	1010	1480	5900	9270	6120	6520	e5500	3060	3580	1740	2110	2250
14	926	1750	18200	7700	5580	6240	e6000	3150	3530	1740	2060	2180
15	877	1600	14900	6870	5200	5850	e8000	3270	3520	1800	2030	2070
16	931	2140	10200	6290	4870	5530	e10000	3220	3430	1810	2010	1980
17	938	2050	13800	5850	4600	5310	e9000	3210	3360	1780	2010	1910
18	951	1690	13600	5380	4400	5170	e8000	3120	3280	1780	2000	1860
19	966	1580	12100	4970	4560	5130	6940	3160	3070	1750	2040	1800
20	954	1880	10900	4650	6100	5130	5560	3400	2940	1780	2060	1720
21	969	3000	9450	5580	8330	5680	4190	3460	2760	1780	2050	1540
22	1030	5820	7790	8530	7380	5880	3880	3440	2680	1790	2090	1430
23	1050	4900	6940	7180	6920	5920	3650	3310	2580	1780	2130	1350
24	1020	3490	6000	6120	6910	5830	3470	3140	2520	1770	2130	1230
25	1050	4840	5230	7940	6330	6280	3390	3080	2390	1730	2110	1160
26	1070	4510	4660	13200	5790	5890	3770	3000	2240	1720	2120	1180
27	1070	3370	4360	12000	5290	5680	3560	2990	2100	1730	2130	1180
28	1080	4640	4830	9230	4790	5420	3600	3330	1980	1740	2130	1210
29	1080	11200	5380	7540	---	5090	3390	3460	1950	1780	2130	1230
30	1370	7590	6500	6500	---	4560	3370	3420	1930	1780	2130	1270
31	1430	---	7740	5670	---	4300	---	3600	---	1760	2140	---
TOTAL	33802	81170	261870	298040	187280	154100	152310	108950	93860	55650	62840	55330
MEAN	1090	2706	8447	9614	6689	4971	5077	3515	3129	1795	2027	1844
MAX	1450	11200	18200	21600	17800	6520	10000	4580	3770	1910	2150	2390
MIN	877	1080	4360	4650	4400	3380	3370	2990	1930	1720	1760	1160
AC-FT	67050	161000	519400	591200	371500	305700	302100	216100	186200	110400	124600	109700

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2002, BY WATER YEAR (WY)

	1971	4680	9303	10020	9982	7920	6530	5162	3529	2426	2295	2096
MEAN	1971	4680	9303	10020	9982	7920	6530	5162	3529	2426	2295	2096
MAX	3497	16650	37410	33800	30280	17750	15090	8905	6292	3849	3370	3187
(WY)	1983	1985	1997	1997	1983	1983	1982	1996	1993	1999	1984	1983
MIN	1090	1386	2124	1922	1969	2023	2083	2124	1679	1106	1671	1346
(WY)	2002	1988	1990	2001	2001	2001	1994	1992	2001	2001	1994	1980

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1978 - 2002

ANNUAL TOTAL	908194	1545202		
ANNUAL MEAN	2488	4233		
HIGHEST ANNUAL MEAN			5473	
LOWEST ANNUAL MEAN			10180	1997
HIGHEST DAILY MEAN	18200	Dec 14	21600	Jan 8
LOWEST DAILY MEAN	877	Oct 15	877	Oct 15 2001
ANNUAL SEVEN-DAY MINIMUM	935	Oct 14	935	Oct 14 2001
ANNUAL RUNOFF (AC-FT)	1801000		3065000	3965000
10 PERCENT EXCEEDS	4440		8130	11100
50 PERCENT EXCEEDS	1830		3440	3100
90 PERCENT EXCEEDS	1080		1180	1690

e Estimated

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1960 to September 1987, January 1995 to current year.

INSTRUMENTATION.--Temperature recorder.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 26.5°C on several days in 1962, Aug. 3, 6, 9-11, 1977; minimum, 1.0°C Jan. 22-25, 1962, Dec. 9-16, 1972, Jan. 9, 10, 1977, Jan. 1-3, 1979, Dec. 23, 24, 1999.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded, 25.7°C July 13; minimum, 4.8°C Jan. 31, Feb. 1.

WATER TEMPERATURE, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	17.1	14.9	15.9	11.8	11.2	11.5	8.3	7.9	8.1	8.8	8.3	8.6
2	17.4	15.0	16.0	12.7	11.6	12.0	8.3	7.7	8.2	9.2	8.7	8.9
3	17.4	15.0	16.1	12.5	11.6	12.0	7.8	7.4	7.6	8.9	8.0	8.6
4	17.4	14.9	16.0	12.3	11.3	11.8	7.6	7.3	7.5	8.1	7.6	7.9
5	17.0	15.3	16.1	12.1	11.2	11.6	8.0	7.3	7.6	7.8	7.3	7.6
6	16.7	15.0	15.9	11.4	10.3	10.9	8.4	8.0	8.2	9.4	7.8	8.6
7	16.1	14.8	15.5	10.3	9.2	9.8	8.1	7.5	7.9	9.8	9.4	9.6
8	16.0	14.3	15.3	9.5	8.6	9.0	7.6	7.2	7.3	9.8	9.6	9.7
9	15.2	13.6	14.5	9.2	8.2	8.6	7.2	6.8	7.0	9.6	8.9	9.2
10	14.3	13.0	13.6	8.8	7.8	8.2	6.8	6.5	6.7	9.0	8.2	8.6
11	14.8	13.3	13.9	8.9	7.8	8.3	6.9	6.3	6.6	8.3	7.7	8.0
12	14.5	13.0	13.7	9.1	8.2	8.6	7.1	6.8	7.0	7.8	7.3	7.6
13	14.2	12.4	13.3	9.5	8.5	8.9	8.1	7.1	7.5	7.6	7.0	7.4
14	14.2	12.2	13.2	10.3	9.4	9.9	8.0	7.0	7.6	7.2	6.6	6.9
15	14.0	12.5	13.3	10.9	10.2	10.6	7.1	6.8	7.0	6.7	5.8	6.3
16	13.8	12.4	13.3	11.3	10.8	11.0	7.9	7.1	7.5	5.8	5.2	5.5
17	13.5	12.3	13.0	11.0	10.0	10.7	8.3	7.8	8.1	5.7	5.0	5.3
18	13.3	11.9	12.6	10.3	9.7	10	8.0	7.5	7.7	5.7	5.0	5.4
19	13.2	11.6	12.3	10.4	9.8	10.1	7.6	7.4	7.5	6.0	5.6	5.8
20	13.2	11.6	12.4	10.2	9.9	10.1	7.8	7.4	7.6	6.4	5.7	6.0
21	13.0	11.6	12.3	10.1	9.7	9.9	7.7	7.4	7.5	6.6	6.1	6.3
22	12.9	11.8	12.3	10.0	9.4	9.8	7.6	7.2	7.4	6.2	5.7	5.9
23	12.9	12.1	12.5	9.5	9.1	9.3	7.5	7.1	7.3	6.3	5.6	5.9
24	12.3	11.2	11.6	9.3	8.6	9.0	7.3	7.0	7.2	6.6	5.8	6.2
25	12.3	11.0	11.6	8.7	8.2	8.5	7.2	6.8	7.0	7.1	6.2	6.6
26	12.0	10.8	11.4	8.5	7.9	8.2	7.1	6.6	6.8	7.0	6.5	6.8
27	11.2	10.3	10.7	8.0	7.4	7.8	7.3	6.7	7.0	6.6	5.8	6.1
28	11.3	10.0	10.6	8.2	7.3	7.7	7.7	7.2	7.4	6.2	5.5	5.9
29	10.7	10.1	10.4	8.3	7.9	8.1	8.0	7.4	7.7	6.2	5.3	5.6
30	11.2	10.2	10.6	8.1	7.8	7.9	8.4	7.8	8.1	5.5	4.9	5.2
31	11.7	10.9	11.3	--	--	--	8.6	8.2	8.4	5.2	4.8	5.0
MONTH	17.4	10.0	13.3	12.7	7.3	9.7	8.6	6.3	7.5	9.8	4.8	7.0

14372300 ROGUE RIVER NEAR AGNESS, OR--Continued

WATER TEMPERATURE, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	5.7	4.8	5.3	7.9	6.8	7.3	12.5	10.9	11.7	13.1	12.2	12.5
2	6.3	5.4	5.8	7.6	6.3	6.9	13.0	11.3	12.2	13.8	11.5	12.6
3	6.9	6.1	6.4	7.5	6.2	6.8	13.3	11.7	12.6	14.6	12.5	13.5
4	7.1	6.3	6.7	7.7	6.4	7.0	13.5	12.3	13.0	14.6	12.6	13.8
5	6.9	6.2	6.5	7.6	7.1	7.4	13.4	12.4	12.9	14.5	12.8	13.7
6	6.9	6.3	6.6	8.1	7.5	7.9	13.1	11.8	12.5	14.4	13.0	13.9
7	7.1	6.6	6.9	8.2	7.5	7.8	12.7	11.0	11.9	14.6	12.8	13.8
8	7.3	6.8	7.1	7.8	7.2	7.6	12.8	11.0	11.9	14.3	12.5	13.5
9	7.1	6.8	7.0	7.5	6.8	7.1	12.8	11.5	12.1	14.1	12.5	13.3
10	7.3	6.8	7.0	7.4	7.0	7.2	12.7	11.4	12.1	13.6	12.6	13.1
11	7.6	6.7	7.1	8.2	7.2	7.6	12.9	11.8	12.3	14.3	12.1	13.1
12	7.4	6.8	7.1	8.3	7.8	8.1	13.6	11.7	12.5	15.3	12.8	13.9
13	7.9	7.0	7.4	8.2	7.5	7.9	13.3	12.0	12.6	15.5	14.3	14.7
14	7.7	6.9	7.3	8.2	7.3	7.8	12.6	11.4	12.1	16.3	14.4	15.1
15	7.6	6.7	7.2	8.1	7.3	7.7	11.4	10.0	10.8	16.1	14.0	15.0
16	8.2	7.2	7.7	7.7	7.0	7.2	10.0	8.7	9.3	16.2	14.3	15.2
17	8.2	7.6	7.9	7.7	6.6	7.1	9.0	8.4	8.7	17.1	15.0	15.9
18	8.2	7.6	7.9	7.2	6.6	6.9	9.5	8.4	8.8	16.8	15.5	16.1
19	8.5	7.9	8.2	8.0	6.6	7.3	10.0	8.4	9.2	15.5	14.6	15.2
20	8.7	8.1	8.4	8.7	7.3	8.1	11.5	8.9	10.1	15.1	14.0	14.5
21	9.7	8.6	9.1	9.6	8.2	9.0	12.1	9.6	10.8	14.0	13.4	13.6
22	10.1	8.9	9.5	9.6	8.9	9.3	13.1	11.1	12.1	15.3	12.8	13.9
23	9.9	9.2	9.5	9.5	8.9	9.2	13.7	12.0	12.8	15.8	13.7	14.7
24	10.1	9.0	9.4	10.1	8.9	9.4	14.3	12.3	13.2	17.0	14.7	15.7
25	9.3	8.2	8.8	10.4	8.8	9.6	14.9	12.9	13.7	17.7	16.0	16.7
26	8.8	7.9	8.3	11.0	9.1	9.9	14.4	13.2	13.6	18.9	16.8	17.6
27	8.5	7.5	8.0	11.1	9.1	10	13.5	12.6	13.1	17.8	17.1	17.5
28	8.2	7.2	7.7	11.1	9.1	10.2	13.7	12.3	12.8	17.1	16.6	17.0
29	---	---	---	11.4	9.4	10.5	13.4	11.9	12.6	17.8	16.2	16.9
30	---	---	---	11.4	9.8	10.7	12.9	12.2	12.6	18.9	16.5	17.6
31	---	---	---	11.9	10.3	11.2	---	---	---	19.3	17.6	18.4
MONTH	10.1	4.8	7.6	11.9	6.2	8.3	14.9	8.4	11.9	19.3	11.5	14.9
	JUNE			JULY			AUGUST			SEPTEMBER		
1	19.2	17.7	18.4	23.6	20.1	21.6	23.4	19.9	22.1	22.3	18.6	20.5
2	18.9	17.1	18.0	23.8	20.0	21.7	22.7	20.0	21.3	22.2	19.3	20.5
3	18.6	17.1	17.8	23.1	20.0	21.4	21.8	18.5	20.6	21.4	19.5	20.2
4	18.9	17.0	18.0	23.0	19.6	21.2	21.8	18.7	19.9	20.9	18.6	19.6
5	---	---	---	24.2	19.6	21.4	19.7	16.9	18.8	20.5	18.0	19.0
6	---	---	---	23.2	19.7	21.4	19.8	16.7	18.4	19.6	17.4	18.3
7	---	---	---	23.3	20.2	21.6	20.2	16.0	18.4	18.8	16.6	17.6
8	---	---	---	23.5	18.7	21.5	20.9	16.2	18.8	18.2	16.0	17.0
9	16.7	14.6	15.8	24.8	19.3	22.0	21.9	17.0	19.5	18.5	16.3	17.2
10	17.0	14.5	15.9	24.8	20.3	22.8	22.6	18.5	20.2	18.9	16.5	17.6
11	18.3	15.4	16.9	25.3	22.0	23.6	22.6	18.6	20.8	19.6	17.3	18.2
12	19.4	16.7	18.2	25.4	22.9	24.1	23.1	19.9	21.2	20.3	17.6	18.7
13	20.2	18.0	19.1	25.7	23.2	24.3	22.6	20.3	21.2	20.6	18.0	19.1
14	20.0	18.4	19.3	25.1	22.1	23.6	23.7	19.2	21.4	19.8	17.9	18.6
15	20.1	18.3	19.2	24.6	21.9	23.3	23.5	20.0	21.6	19.8	17.4	18.4
16	19.8	18.2	19.1	24.7	20.9	22.9	23.7	19.5	21.7	18.7	16.9	17.7
17	19.1	17.3	18.1	25.1	21.5	23.1	23.7	20.5	21.9	18.5	17.0	17.7
18	18.5	16.9	17.7	25.2	20.9	23.2	21.6	19.8	20.7	19.1	16.7	17.9
19	19.2	16.4	17.7	25.2	21.8	23.2	22.1	19.1	20.3	19.3	17.1	18.1
20	19.3	17.0	18.2	24.9	20.8	23.2	21.2	18.8	20.0	19.0	17.1	18.0
21	20.4	17.9	18.9	25.2	20.9	23.2	21.4	18.6	19.8	18.8	16.7	17.7
22	21.1	18.4	19.5	23.8	20.7	22.7	20.8	18.1	19.4	19.0	16.9	17.9
23	21.8	19.0	20.1	24.9	21.1	22.9	21.1	18.3	19.4	19.8	16.9	18.2
24	22.4	19.4	20.8	24.6	20.9	22.9	20.9	17.8	19.5	19.9	16.9	18.3
25	23.1	20.2	21.4	24.9	20.7	23.0	21.8	18.7	19.9	19.6	16.9	18.3
26	23.9	20.6	21.9	24.9	21.6	23.3	22.0	19.0	20.4	19.4	16.9	18.1
27	23.4	20.9	22.0	24.9	21.8	23.2	22.5	19.6	20.8	19.3	16.9	17.9
28	22.7	20.7	21.6	25.1	21.1	23.3	22.9	19.7	20.9	18.8	16.6	17.7
29	22.9	20.1	21.3	25.1	21.0	23.4	22.2	19.6	20.9	17.9	16.2	17.1
30	22.9	19.8	21.3	25.1	22.0	23.4	22.2	18.4	20.5	17.1	15.5	16.3
31	---	---	---	24.3	21.5	22.8	22.9	19.4	20.5	---	---	---
MONTH	---	---	---	25.7	18.7	22.7	23.7	16.0	20.3	22.3	15.5	18.2

14377100 ILLINOIS RIVER NEAR KERBY, OR

LOCATION.--Lat 42°13'55", long 123°39'45", in SE 1/4 SE 1/4 sec.29, T.38 S., R.8 W., Josephine County, Hydrologic Unit 17100311, Siskiyou National Forest, on right bank 1.6 mi upstream from Josephine Creek, 2.5 mi northwest of Kerby, and at mile 50.3.

DRAINAGE AREA.--380 mi².

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,198.8 ft above NGVD of 1929. Prior to Jan. 28, 1965, water-stage recorder, and Jan. 28 to Sept. 30, 1965, nonrecording gage 700 ft downstream at datum 2.99 ft lower.

REMARKS.--Records good. No regulation. Diversions for irrigation upstream from station. National Weather Service telephone telemeter at station.

AVERAGE DISCHARGE.--41 years (water years 1962-2002), 1,257 ft³/s, 44.94 in/yr, 910,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 92,200 ft³/s Dec. 22, 1964, gage height, 45.28 ft, from floodmark, site and datum then in use, from rating curve extended above 30,000 ft³/s on basis of slope-area measurement of peak flow; minimum discharge, 12 ft³/s Aug. 24, 1992.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 11,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	0130	11,500	17.13	Jan. 6	1100	*11,800	*17.29

Minimum discharge, 13 ft³/s Sept. 1.

DISCHARGE, in CFS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	114	3820	2770	1420	1320	922	632	316	92	34	15
2	25	87	4310	4520	1490	1180	942	611	296	80	34	22
3	23	69	4020	4190	1810	1070	1020	596	74	74	32	23
4	23	61	2510	3100	1820	978	1080	569	261	76	34	16
5	24	57	5560	2570	1590	933	1100	553	252	77	34	18
6	25	58	6680	9350	1450	990	999	540	245	75	34	15
7	25	58	3550	6460	5600	1700	926	517	235	73	34	17
8	26	59	2310	8380	6820	1510	864	e485	225	68	36	18
9	26	59	1830	5350	3870	1330	885	e465	219	61	35	20
10	27	58	1460	3600	2770	1410	1160	450	206	60	34	20
11	27	58	1200	2740	2210	2470	1080	e425	196	60	33	20
12	27	68	1050	2260	1890	3810	1100	e415	189	56	34	22
13	29	118	2180	1920	1670	3340	1050	418	180	58	35	28
14	29	619	7490	1680	1540	2710	2070	413	172	59	33	29
15	33	480	3330	1460	1410	2230	1800	403	167	54	31	29
16	34	1230	2830	1280	1340	1920	1380	390	156	52	27	28
17	30	876	5400	1160	1260	1710	1260	386	152	52	25	23
18	30	484	3890	1050	1170	1500	1180	395	160	49	25	18
19	30	356	4040	988	1660	1360	1080	392	157	53	24	17
20	29	648	3970	920	3640	1360	1010	423	148	53	23	15
21	29	1810	2810	2200	3230	1460	923	429	142	52	25	14
22	29	5390	2520	2270	2610	1530	850	382	138	49	20	15
23	30	2520	2670	1770	3520	1580	801	352	135	48	24	16
24	36	1460	2130	1520	3170	1660	748	336	118	45	26	15
25	39	1800	1730	2170	2410	1470	720	333	112	44	27	15
26	38	1810	1450	5410	1980	1300	697	339	107	41	23	16
27	37	1130	1300	3300	1700	1170	685	344	101	39	22	23
28	38	3870	1630	2390	1490	1070	e650	359	99	40	22	23
29	40	6270	1750	1900	---	1010	e600	370	98	35	21	23
30	55	2780	1790	1580	---	973	674	371	98	32	18	24
31	100	---	3140	1380	---	939	---	339	---	33	15	---
TOTAL	1018	34457	94350	91638	66540	48993	30256	13432	5355	1740	874	597
MEAN	32.84	1149	3044	2956	2376	1580	1009	433.3	178.5	56.13	28.19	19.90
MAX	100	6270	7490	9350	6820	3810	2070	632	316	92	36	29
MIN	23	57	1050	920	1170	933	600	333	98	32	15	14
AC-FT	2020	68350	187100	181800	132000	97180	60010	26640	10620	3450	1730	1180
CFSM	0.09	3.02	8.01	7.78	6.25	4.16	2.65	1.14	0.47	0.15	0.07	0.05
IN.	0.10	3.37	9.24	8.97	6.51	4.80	2.96	1.31	0.52	0.17	0.09	0.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2002, BY WATER YEAR (WY)

	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992		
MEAN	216.0	1456	2614	2934	2588	2305	1565	900.6	365.7	98.47	46.62	62.18																					
MAX	1771	6344	9242	7184	6686	4867	4518	2439	1214	280	116	358																					
(WY)	1963	1974	1965	1970	1986	1983	1982	1963	1993	1983	1976	1978																					
MIN	25.0	82.4	115	236	358	508	433	315	82.7	36.5	19.0	15.5																					
(WY)	1988	1988	1977	1977	1977	1988	1977	1992	1992	1987	1992	1992																					

	FOR 2001 CALENDAR YEAR				FOR 2002 WATER YEAR			WATER YEARS 1962 - 2002			
ANNUAL TOTAL	208470				389250						
ANNUAL MEAN	571.2				1066			1257			
HIGHEST ANNUAL MEAN								2372			
LOWEST ANNUAL MEAN								275			
HIGHEST DAILY MEAN	7490				Dec 14	9350		Jan 6	64000		
LOWEST DAILY MEAN	16				Aug 16	14		Sep 21	13		
ANNUAL SEVEN-DAY MINIMUM	17				Aug 15	15		Sep 20	14		
ANNUAL RUNOFF (AC-FT)	413500				772100			910600			
ANNUAL RUNOFF (CFSM)	1.50				2.81			3.31			
ANNUAL RUNOFF (INCHES)	20.41				38.11			44.94			
10 PERCENT EXCEEDS	1460				2820			3100			
50 PERCENT EXCEEDS	280				413			495			
90 PERCENT EXCEEDS	22				24			38			

e Estimated

14400000 CHETCO RIVER NEAR BROOKINGS, OR

LOCATION.--Lat 42°07'25", long 124°11'10", in SE 1/4 sec.12, T.40 S., R.13 W., Curry County, Hydrologic Unit 17100312, on right bank 16 ft upstream from bridge, 0.5 mi upstream from Elk Creek, 6.8 mi northeast of Brookings, and at mile 10.7.

DRAINAGE AREA.--271 mi².

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 50 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good. No regulation or diversion upstream from station. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--33 years (water years 1970-2002), 2,244 ft³/s, 112.52 in/yr, 1,626,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 76,100 ft³/s Nov. 19, 1996, gage height, 28.56 ft; minimum discharge, 42 ft³/s Oct. 14, 1987.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 22, 1964, reached a stage of 32.25 ft, from high-water mark on bridge pier, discharge, 85,400 ft³/s, from rating curve extended above 45,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 28	2000	21,000	13.08	Jan. 6	1030	23,600	13.80
Dec. 14	0130	21,200	13.14	Jan. 8	0600	*28,800	*15.12

Minimum discharge, 81 ft³/s Oct. 17.

DISCHARGE, in CFS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	1370	11300	5050	3810	2100	1230	852	400	183	91	69
2	81	674	10400	8270	3680	1850	1160	794	362	169	92	68
3	81	406	8720	6680	4590	1660	1110	743	339	162	90	68
4	81	293	5940	4890	4190	1500	1050	695	323	154	89	68
5	81	237	11500	4210	3640	1410	993	658	310	e150	89	68
6	81	203	12600	17800	3530	1770	943	629	298	e146	89	68
7	81	179	7650	15000	11500	2700	882	598	284	e142	88	69
8	81	161	5090	21900	11900	2220	827	571	275	e138	87	69
9	81	149	3860	11600	7410	1930	1010	546	271	e134	86	69
10	81	139	3110	7500	5320	2980	1790	524	264	e130	84	69
11	93	135	2610	5470	4130	6670	1850	504	256	e126	82	68
12	97	291	2290	4390	3390	10000	1920	484	247	123	81	67
13	87	1770	5560	3660	2910	6510	1780	466	239	121	81	67
14	81	5480	13100	3190	2560	4880	4740	453	234	119	80	67
15	81	3500	6520	2830	2280	3980	3630	435	230	116	80	66
16	81	5960	7130	2560	2080	3380	2960	e420	226	113	78	67
17	81	3230	13300	2350	1910	3000	2900	405	234	112	78	73
18	81	2110	8330	2170	1780	2630	2730	394	343	111	78	95
19	81	2230	8030	2100	3310	2350	2470	395	292	110	78	88
20	81	4080	7060	2090	5260	2220	2250	446	243	109	77	77
21	81	7130	5090	5150	4710	2220	2030	405	227	105	77	71
22	88	13800	4520	4400	3880	2230	1800	399	219	103	76	69
23	190	7410	4430	3540	6690	2440	1600	375	216	103	76	68
24	155	4850	3630	3170	5950	2810	1440	358	206	103	77	67
25	104	5010	3050	7080	4390	2400	1300	344	197	101	77	66
26	90	4910	2580	11400	3470	2060	1180	334	189	100	77	65
27	85	3820	2480	6650	2870	1840	1100	342	184	97	75	65
28	86	9330	3600	4820	2440	1670	1020	417	180	93	74	64
29	90	14500	3070	3830	---	1540	950	566	192	91	72	65
30	686	8030	2890	3230	---	1420	942	556	200	91	72	65
31	1660	---	4160	2880	---	1330	---	459	---	91	72	---
TOTAL	4969	111387	193600	189860	123580	87700	51587	15567	7680	3746	2503	2085
MEAN	160.3	3713	6245	6125	4414	2829	1720	502.2	256.0	120.8	80.74	69.50
MAX	1660	14500	13300	21900	11900	10000	4740	852	400	183	92	95
MIN	81	135	2290	2090	1780	1330	827	334	180	91	72	64
AC-FT	9860	220900	384000	376600	245100	174000	102300	30880	15230	7430	4960	4140
CFSM	0.59	13.7	23.0	22.6	16.3	10.4	6.35	1.85	0.94	0.45	0.30	0.26
IN.	0.68	15.29	26.58	26.06	16.96	12.04	7.08	2.14	1.05	0.51	0.34	0.29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2002, BY WATER YEAR (WY)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002			
MEAN	553.9	3264	5041	5188	4645	3790	2328	1176	580.6	193.5	115.2	186.4																								
MAX	2540	10230	13350	13150	11500	7041	6956	3495	2121	442	310	1531																								
(WY)	1982	1974	1997	1970	1986	1989	1982	1996	1993	1983	1983	1978																								
MIN	48.3	107	121	479	619	859	674	430	221	121	69.1	54.9																								
(WY)	1988	1994	1977	1977	1977	1988	1977	1973	1992	2002	1987	1987																								

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1970 - 2002
ANNUAL TOTAL	496425	794264	
ANNUAL MEAN	1360	2176	2244
HIGHEST ANNUAL MEAN			3911
LOWEST ANNUAL MEAN			549
HIGHEST DAILY MEAN	14500	Nov 29	57000
LOWEST DAILY MEAN	81	Sep 6	44
ANNUAL SEVEN-DAY MINIMUM	81	Sep 10	46
ANNUAL RUNOFF (AC-FT)	984700	1575000	1626000
ANNUAL RUNOFF (CFSM)	5.02	8.03	8.28
ANNUAL RUNOFF (INCHES)	68.14	109.03	112.52
10 PERCENT EXCEEDS	3610	6180	5970
50 PERCENT EXCEEDS	712	556	779
90 PERCENT EXCEEDS	81	77	82

e Estimated

CHEMICAL QUALITY OF PRECIPITATION

SANDY RIVER BASIN

452650122091801 BULL RUN RESERVOIR NUMBER TWO, OR

LOCATION.--Lat 45°26'55", long 122°08'45", in SE 1/4 SE 1/2 sec.26, T.1 S., R.5 E., Clackamas County, Hydrologic Unit 17080001, in Mount Hood National Forest, on headworks dam on Bull Run River, 4.4 mi northeast of town of Bull Run, and approximately 20 mi east of Portland.

PERIOD OF RECORD.--June 1980 to September 1981 (event sampling), September 1981 to November 1981 (weekly composite), July 1982 to current year (weekly composite).

INSTRUMENTATION.--A bulk-type plastic double cylinder with receiving funnel directing deposition to inner cylinder was used for the period of record June 1980 to September 1981. The wet-deposition sample collector is an Aerochem Model 301 wet/dry deposition collector. Refer to WDR OR-92-1 for further description of instrumentation.

REMARKS.--The sample collector is located in the restricted access area of the city of Portland's Bull Run River Watershed. Samples are collected by Bull Run Headworks Water Quality Laboratory personnel and analyzed by the Illinois supply Central Analytical Laboratory.

WATER-QUALITY DATA

Date	TOTAL PRECIP- ITATION FOR	PH FIELD	PH LAB	SPEC. CONDCU- TANCE FIELD	SPEC. CONDCU- TANCE LAB	CALCIUM ATM DEP	MAG- NESIUM ATM DEP	POTAS- SIUM ATM DEP	SODIUM ATM DEP	CHLO- RIDE ATM DEP	SULFATE ATM DEP	NI- TROGEN AMMON.	NI- TROGEN NITRATE
	DEFINED PERIOD (IN) (00193)	ATM DEP WET T (UNITS) (83106)	ATM DEP WET T (UNITS) (83107)	ATM DEP WET TOT (US/CM) (83154)	ATM DEP WET TOT (US/CM) (83156)	WET DIS (MG/L) (82932)	WET DIS (MG/L) (83002)	WET DIS (MG/L) (83120)	WET DIS (MG/L) (83138)	WET DIS (MG/L) (82944)	WET DIS AS SO4 (MG/L) (83160)	WET DIS AS NH4 (MG/L) (83047)	WET DIS AS NO3 (MG/L) (83071)
OCT 2001													
02-09	.53	4.87	4.95	21.3	21.7	.12	.182	.080	1.71	2.87	1.32	.36	1.36
OCT 09-16	2.65	5.34	5.17	4.6	13.0	.07	.130	.052	1.14	2.14	.56	.15	.50
OCT 16-23	1.84	5.10	5.28	11.9	7.4	.03	.021	.014	.188	.33	.24	.09	.32
OCT 23-30	1.64	5.09	5.17	6.6	7.4	.04	.051	.022	.475	.88	.34	.07	.30
OCT 30- NOV 06	3.22	5.14	5.14	5.9	6.6	.04	.040	.027	.428	.75	.27	.04	.19
NOV 06-13	.74	5.24	5.34	3.7	2.7	.02	<.003	.006	.008	.02	.07	.04	.21
NOV 13-20	2.53	5.19	5.19	4.7	4.1	.02	.009	.007	.101	.17	.14	.02	.25
NOV 20-27	3.08	5.28	5.30	4.6	4.4	.01	.020	.011	.200	.36	.16	.05	.25
NOV 27- DEC 04	5.75	5.34	5.32	5.4	4.8	.03	.035	.014	.334	.58	.17	<.02	.14
DEC 04-11	4.46	5.53	5.54	6.2	7.0	.04	.062	.020	.579	1.08	.27	.04	.24
DEC 11-18	4.87	5.36	5.47	4.8	4.4	.02	.029	.011	.355	.62	.15	<.02	.11
DEC 18-26	.41	5.28	5.11	8.8	8.7	.04	.074	.025	.676	1.24	.28	.04	.31
DEC 26 2001- JAN 02 2002	.67	4.36	5.22	3.8	3.8	.01	.007	.012	.076	.12	.11	.03	.26
JAN 02-08	1.59	5.23	5.21	5.4	7.9	.02	.035	.006	.332	.57	.17	<.02	.24
JAN 08-15	.71	5.11	5.19	7.8	8.8	.05	.056	.022	.540	.96	.40	.14	.67
JAN 15-22	3.61	5.09	5.19	11.6	7.6	.04	.053	.018	.472	.86	.37	.05	.27
JAN 22-29	3.86	4.63	5.24	4.0	4.6	.01	.018	.005	.208	.37	.12	<.02	.10
JAN 29- FEB 05	1.41	5.39	5.19	3.8	4.2	.01	.010	.003	.119	.20	.12	.03	.24
FEB 05-12	2.17	5.26	5.37	4.6	3.8	.02	.018	.006	.190	.31	.13	.03	.17
FEB 12-19	.70	5.10	5.23	6.7	5.0	.02	.006	.003	.058	.08	.26	.14	.59
FEB 19-26	1.48	5.28	5.35	5.2	4.1	.02	.014	.018	.169	.27	.15	.08	.31
FEB 26- MAR 05	.11	5.22	5.63	17.8	16.5	.35	.143	.069	1.24	1.58	1.48	.49	2.01
MAR 05-12	3.86	5.26	5.35	4.6	4.4	.02	.020	.004	.187	.31	.16	.02	.24
MAR 12-19	3.40	5.17	5.31	7.3	8.8	.04	.068	.031	.656	1.17	.38	.08	.29
MAR 19-26	.37	5.13	5.28	8.7	8.3	.06	.029	.034	.220	.37	.70	.33	.87
MAR 26- APR 02	.23	5.76	6.12	10.9	10.9	.11	.069	.045	.629	1.00	.76	.61	.86
APR 02-09	.53	5.56	6.12	6.6	7.1	.10	.014	.014	.055	.09	.45	.62	1.06
APR 09-16	3.30	5.67	5.60	9.7	3.8	.04	.022	.015	.188	.33	.21	.08	.18
APR 16-23	.55	5.27	5.13	6.0	6.7	.03	.011	.006	.079	.14	.25	.10	.55
APR 23-30	.75	5.37	5.40	3.8	3.5	.02	.006	.008	.044	.08	.16	.09	.30
APR 30- MAY 07	.62	4.96	5.2	13.0	13.9	--	--	--	--	--	--	--	--
MAY 07-14	.14	4.64	4.91	14.6	11.6	.08	.029	.019	.186	.31	.77	.39	1.56
MAY 14-21	.61	4.85	4.91	10.9	10.5	.08	.018	.018	.096	.15	.54	.29	1.40
MAY 21-28	.82	5.25	5.31	5.2	4.7	.03	.013	.011	.120	.19	.33	.18	.45
MAY 28- JUN 04	.84	5.38	5.43	7.3	2.6	<.01	<.003	.004	<.003	.01	.09	.06	.21

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

CHEMICAL QUALITY OF PRECIPITATION

SANDY RIVER BASIN

452650122091801 BULL RUN RESERVOIR NUMBER TWO, OR--Continued

WATER-QUALITY DATA

Date	TOTAL PRECIP- ITATION FOR DEFINED PERIOD (IN) (00193)	PH FIELD ATM DEP WET T (UNITS) (83106)	PH LAB ATM DEP WET T (UNITS) (83107)	SPEC. CONduc- TANCE FIELD ATM DEP WET TOT (US/CM) (83154)	SPEC. CONduc- TANCE LAB ATM DEP WET TOT (US/CM) (83156)	CALCIUM ATM DEP WET DIS (MG/L) (82932)	MAG- NESIUM ATM DEP WET DIS (MG/L) (83002)	POTAS- SIUM ATM DEP WET DIS (MG/L) (83120)	SODIUM ATM DEP WET DIS (MG/L) (83138)	CHLO- RIDE ATM DEP WET DIS (MG/L) (82944)	SULFATE ATM DEP AS SO4 (MG/L) (83160)	NI- TROGEN AMMON. ATM DEP AS NH4 (MG/L) (83047)	NI- TROGEN NITRATE ATM DEP AS NO3 (MG/L) (83071)
JUN 2002													
04-11	.52	4.99	5.23	11.3	10.1	.07	.059	.036	.492	.83	.62	.30	.94
JUN													
11-18	1.15	5.06	5.34	4.3	3.1	.03	.003	.003	.023	.05	.12	.04	.25
JUN													
18-25	<.01	--	--	--	--	--	--	--	--	--	--	--	--
JUN 25-													
JUL 02	1.90	5.17	5.29	9.9	2.8	<.01	.003	<.003	.021	.05	.11	<.02	.16
JUL													
02-09	.35	4.74	4.80	10.1	11.2	.05	.023	.048	.118	.15	.71	.24	1.15
JUL													
09-16	.00	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
16-23	.00	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
23-30	.02	--	--	--	--	--	--	--	--	--	--	--	--
JUL 30-													
AUG 06	.06	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
06-13	.00	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
13-20	.07	4.98	5.05	10.6	7.7	.06	.005	.010	.032	.07	.90	.28	.50
AUG													
20-27	.00	--	--	--	--	--	--	--	--	--	--	--	--
AUG 27-													
SEP 03	.09	4.98	4.76	21.8	18.1	.09	.078	.043	.728	1.25	1.73	.42	1.11
SEP													
03-10	.00	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
10-17	.85	5.17	5.09	5.6	5.1	.02	.008	.006	.063	.10	.27	.06	.37
SEP													
17-24	.00	--	--	--	--	--	--	--	--	--	--	--	--
SEP 24-													
OCT 01	1.85	5.65	5.33	6.8	7.0	.03	.051	.020	.483	.86	.37	.12	.25

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

SILVER LAKE BASIN

430701121040001 SILVER LAKE RANGER STATION, OR

LOCATION.--Lat 43°07'01", Long 121°04'00", in NE 1/4 SW 1/4 sec.21, T.28 S., R.14 E., Lake County, Hydrologic Unit 17120005, at Silver Lake Ranger Station, 0.5 mi south of State Highway 31, and 1 mi southwest of town of Silver Lake.

PERIOD OF RECORD.--August 1983 to current year (weekly composite).

INSTRUMENTATION.--The wet-deposition sample collector is an Aerochem Metrics Model 301 wet/dry deposition collector. Refer to WDR OR-92-1 for further description of instrumentation.

REMARKS.--Inches of precipitation obtained from an on-site recording weighing-bucket gage. Samples are collected by Silver Lake Ranger Station personnel and analyzed by the Illinois State Water Survey Central Analytical Laboratory.

WATER-QUALITY DATA

Date	TOTAL PRECIPITATION FOR PERIOD (IN)	PH FIELD ATM DEP (UNITS)	PH LAB ATM DEP (UNITS)	SPEC. CONDUCTANCE FIELD (US/CM)	SPEC. CONDUCTANCE LAB (US/CM)	CALCIUM ATM DEP (MG/L)	MAGNESIUM ATM DEP (MG/L)	POTASSIUM ATM DEP (MG/L)	SODIUM ATM DEP (MG/L)	CHLORIDE ATM DEP (MG/L)	SULFATE ATM DEP (MG/L)	NI-TROGEN AMMON. ATM DEP (MG/L)	NI-TROGEN NITRATE ATM DEP (MG/L)
	(00193)	(83106)	(83107)	(83154)	(83156)	(82932)	(83002)	(83120)	(83138)	(82944)	(83160)	(83047)	(83071)
OCT 2001													
02-09	<.01	--	--	--	--	--	--	--	--	--	--	--	--
OCT 09-16	.05	4.97	5.55	5.6	2.8	.09	.011	.006	.012	.05	.17	.02	.18
OCT 16-23	.00	--	--	--	--	--	--	--	--	--	--	--	--
OCT 23-30	.08	4.98	5.43	3.3	2.2	.03	.003	<.003	.019	.05	.03	<.02	.15
OCT 30-NOV 06	.03	--	5.90	--	3.0	.07	<.011	.011	.011	.10	.06	.16	.28
NOV 06-13	.03	--	--	--	--	--	--	--	--	--	--	--	--
NOV 13-20	.18	5.02	5.45	2.8	3.0	.02	<.003	.008	.003	.03	.07	.08	.28
NOV 20-27	.74	5.20	5.37	3.3	2.3	.01	<.003	.008	.014	.03	.03	<.02	.11
NOV 27-DEC 04	.41	5.34	5.25	3.2	3.6	.02	<.003	<.003	.014	.05	.07	.05	.14
DEC 04-11	.18	5.21	5.41	3.4	3.1	.05	.003	<.003	.028	.05	.13	.05	.24
DEC 11-18	.37	5.29	5.17	2.7	3.5	<.01	<.003	<.003	<.003	.02	.03	.03	.18
DEC 18-26	.21	5.35	5.46	4.6	2.2	.01	<.003	<.003	<.003	.02	.04	.07	.15
DEC 26 2001- JAN 02 2002	.61	5.36	5.32	4.3	2.7	.01	<.003	<.003	<.003	.03	.02	.02	.09
JAN 02-08	.09	5.17	5.36	2.9	3.2	.01	.003	<.003	.011	.03	.05	.07	.18
JAN 08-15	.00	--	--	--	--	--	--	--	--	--	--	--	--
JAN 15-22	.30	5.27	5.54	2.3	2.0	<.01	<.003	<.003	<.003	.02	.05	.03	.07
JAN 22-29	.04	--	5.49	--	3.2	.04	.003	<.003	.015	.04	.08	.11	.47
JAN 29-FEB 05	.00	--	--	--	--	--	--	--	--	--	--	--	--
FEB 05-12	.17	5.25	5.38	2.3	2.8	.01	<.003	<.003	.027	.02	.02	.03	.07
FEB 12-19	.01	--	--	--	--	--	--	--	--	--	--	--	--
FEB 19-26	.27	4.89	5.13	3.7	4.4	.02	<.003	<.003	.008	.02	.08	.05	.32
FEB 26-MAR 05	.00	--	--	--	--	--	--	--	--	--	--	--	--
MAR 05-12	.08	5.14	5.30	3.7	3.4	.04	.005	<.003	.010	.03	.04	.06	.21
MAR 12-19	.06	--	5.72	--	6.3	.27	.037	.038	.159	.22	.97	.16	.39
MAR 19-26	.10	4.90	5.28	5.4	3.8	.03	.006	<.003	.013	.04	.08	.05	.52
MAR 26-APR 02	.00	--	--	--	--	--	--	--	--	--	--	--	--
APR 02-09	.11	5.26	5.59	6.3	4.1	.06	.007	.006	.018	.04	.26	.16	.48
APR 09-16	.35	5.06	5.30	2.7	3.3	.02	.005	<.003	.009	.02	.07	.05	.14
APR 16-23	.05	--	5.59	--	2.8	.04	.007	.007	.016	.05	.14	.07	.13
APR 23-30	.03	--	--	--	--	--	--	--	--	--	--	--	--
APR 30-MAY 07	.06	5.19	5.80	10.6	10.4	.38	.058	.084	.092	.13	1.27	.71	1.90
MAY 07-14	.00	--	--	--	--	--	--	--	--	--	--	--	--
MAY 14-21	.00	--	--	--	--	--	--	--	--	--	--	--	--
MAY 21-28	.00	--	--	--	--	--	--	--	--	--	--	--	--
MAY 28-JUN 04	.30	4.98	4.98	2.9	8.1	.08	.017	.029	.045	.07	.53	.20	.93

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

CHEMICAL QUALITY OF PRECIPITATION

521

SILVER LAKE BASIN

430701121040001 SILVER LAKE RANGER STATION, OR--Continued

WATER-QUALITY DATA

Date	TOTAL PRECIPITATION FOR DEFINED PERIOD	PH FIELD ATM DEP WET T	PH LAB ATM DEP WET T	SPEC. CONDUCTANCE FIELD WET TOT	SPEC. CONDUCTANCE LAB WET TOT	CALCIUM ATM DEP WET DIS	MAGNESIUM ATM DEP WET DIS	POTASSIUM ATM DEP WET DIS	SODIUM ATM DEP WET DIS	CHLORIDE ATM DEP WET DIS	SULFATE ATM DEP WET DIS AS SO4	NI-TROGEN AMMON. ATM DEP WET DIS AS NH4	NI-TROGEN NITRATE ATM DEP WET DIS AS NO3
	(00193)	(UNITS) (83106)	(UNITS) (83107)	(US/CM) (83154)	(US/CM) (83156)	(MG/L) (82932)	(MG/L) (83002)	(MG/L) (83120)	(MG/L) (83138)	(MG/L) (82944)	(MG/L) (83160)	(MG/L) (83047)	(MG/L) (83071)
JUN 2002													
04-11	.00	--	--	--	--	--	--	--	--	--	--	--	--
JUN 11-18	<.01	--	--	--	--	--	--	--	--	--	--	--	--
JUN 18-24	.23	4.57	4.88	16.8	8.7	.07	.012	.032	.043	.06	.38	.12	.86
JUN 24-JUL 02	.08	--	--	--	--	--	--	--	--	--	--	--	--
JUL 02-09	.00	--	--	--	--	--	--	--	--	--	--	--	--
JUL 09-16	.04	--	7.70	--	160.4	5.14	.325	2.32	26.3	6.78	6.10	<.12	8.07
JUL 16-23	.09	5.39	6.85	41.4	34.8	1.42	.182	.410	.520	.27	.98	2.78	2.14
JUL 23-30	.00	--	--	--	--	--	--	--	--	--	--	--	--
JUL 30-AUG 06	.02	--	4.61	--	16.9	.17	.028	.028	.062	.20	.72	.42	1.31
AUG 06-13	.00	--	--	--	--	--	--	--	--	--	--	--	--
AUG 13-20	.00	--	--	--	--	--	--	--	--	--	--	--	--
AUG 20-27	.03	--	5.04	--	6.0	.12	.023	<.003	.016	.13	.15	<.02	.24
AUG 27-SEP 03	.06	4.60	4.52	17.8	20.7	.36	.049	.057	.071	.18	.98	.18	2.13
SEP 03-10	.10	4.75	4.80	17.3	15.0	.23	.062	.151	.343	.36	1.16	.32	1.77
SEP 10-17	.00	--	--	--	--	--	--	--	--	--	--	--	--
SEP 17-24	.16	5.39	5.35	2.7	2.8	.01	<.003	<.003	<.003	.02	.05	.05	.09
SEP 24-OCT 01	.01	--	--	--	--	--	--	--	--	--	--	--	--

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