

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

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 above NGVD of 1929, from topographic 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.--Records good. Flow regulated by gates and fish racks at lake outlet. No diversion upstream from station.

AVERAGE DISCHARGE.--44 years (water years 1927 1934-53, 1972-77, 1979-84, 2000-05), 56.9 ft³/s, 41,260 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 discharge, 138 ft³/s Oct. 27, gage height, 2.43 ft; minimum discharge, 2.6 ft³/s Aug. 29, 30, result of regulation at outlet.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	e114	50	70	49	39	14	19	47	22	5.6	3.0
2	13	e112	49	69	48	39	14	20	46	21	5.6	3.3
3	13	108	49	68	47	27	16	22	44	21	5.6	3.3
4	13	102	48	66	47	17	17	24	43	21	5.6	3.2
5	13	99	47	64	46	18	18	24	42	21	5.6	13
6	12	94	42	63	47	18	19	25	44	21	5.7	20
7	12	90	33	63	47	18	19	27	44	20	5.7	19
8	12	87	43	67	46	15	16	30	43	20	5.6	18
9	12	83	90	69	46	13	12	33	42	20	5.4	17
10	12	79	98	68	45	13	13	35	41	21	5.0	17
11	12	75	95	66	44	13	15	41	39	20	4.8	17
12	12	73	74	65	44	14	17	45	35	19	4.5	17
13	12	71	83	63	45	14	17	46	31	16	4.5	20
14	12	70	97	62	44	14	18	47	30	15	4.7	22
15	12	68	94	62	44	14	18	55	25	15	4.5	21
16	12	66	91	62	43	15	20	60	22	15	4.2	28
17	13	64	88	61	43	14	22	66	24	15	4.2	35
18	16	61	85	60	42	13	19	72	24	14	4.2	33
19	17	60	82	59	41	15	15	83	23	11	4.3	37
20	18	58	80	58	43	17	16	84	24	8.3	4.2	41
21	42	57	78	57	42	15	16	83	23	8.0	4.2	39
22	56	56	76	56	42	14	17	79	23	7.3	4.3	42
23	57	55	74	55	41	15	15	76	24	7.2	4.0	48
24	56	54	72	54	41	17	12	68	23	6.5	3.9	47
25	57	56	71	53	40	17	13	57	23	6.2	3.8	47
26	55	55	71	52	40	19	14	55	23	6.4	3.6	47
27	86	55	71	52	40	25	14	53	23	6.3	3.6	46
28	130	54	70	52	40	20	17	52	23	6.3	3.5	48
29	126	53	69	51	---	18	18	54	23	6.2	2.8	49
30	122	51	69	50	---	16	18	49	23	6.2	2.8	55
31	116	---	69	50	---	13	---	47	---	6.1	2.9	---
TOTAL	1,164	2,180	2,208	1,867	1,227	549	489	1,531	944	429.0	138.9	855.8
MEAN	37.5	72.7	71.2	60.2	43.8	17.7	16.3	49.4	31.5	13.8	4.48	28.5
MAX	130	114	98	70	49	39	22	84	47	22	5.7	55
MIN	12	51	33	50	40	13	12	19	22	6.1	2.8	3.0
AC-FT	2,310	4,320	4,380	3,700	2,430	1,090	970	3,040	1,870	851	276	1,700

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2005, BY WATER YEAR (WY)

MEAN	41.5	66.4	78.3	80.3	74.4	67.2	56.0	58.9	64.9	39.1	26.0	27.2
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	17.7	5.00	26.5	23.1	9.53	4.48	7.41
(WY)	(1942)	(1937)	(1937)	(1977)	(1977)	(2005)	(1942)	(2002)	(1934)	(1979)	(2005)	(1981)

UMPQUA RIVER BASIN

14312500 LAKE CREEK NEAR DIAMOND LAKE, OR—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1927 - 2005	
ANNUAL TOTAL	14,790.0		13,582.7			
ANNUAL MEAN	40.4		37.2		56.9	
HIGHEST ANNUAL MEAN					90.7 1953	
LOWEST ANNUAL MEAN					36.9 1937	
HIGHEST DAILY MEAN	130	Oct 28	130	Oct 28	250	Jan 1, 1943
LOWEST DAILY MEAN	8.3	Aug 5	2.8	Aug 29	0.00	Aug 25, 1931
ANNUAL SEVEN-DAY MINIMUM	9.3	Jul 14	3.0	Aug 29	1.2	Aug 14, 1978
ANNUAL RUNOFF (AC-FT)	29,340		26,940		41,260	
10 PERCENT EXCEEDS	78		73		99	
50 PERCENT EXCEEDS	39		31		54	
90 PERCENT EXCEEDS	10		6.2		18	

e Estimated

UMPQUA RIVER BASIN

14312500 LAKE CREEK NEAR DIAMOND LAKE, OR—Continued



2005 Water Year
UMPQUA RIVER BASIN

14312500 LAKE CREEK NEAR DIAMOND LAKE, OR

Latitude: 43° 11' 12"

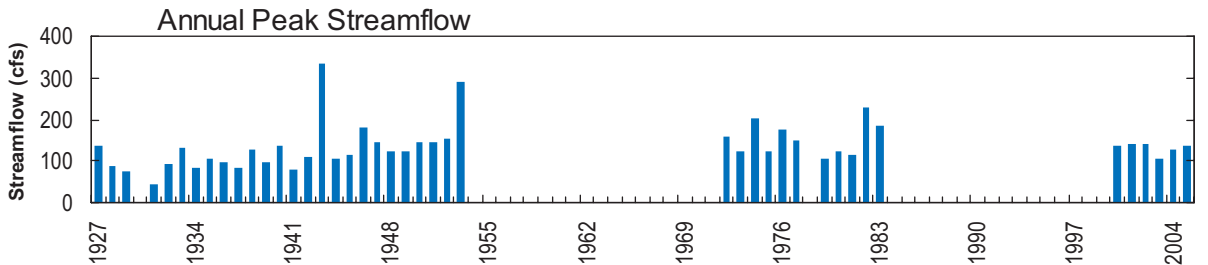
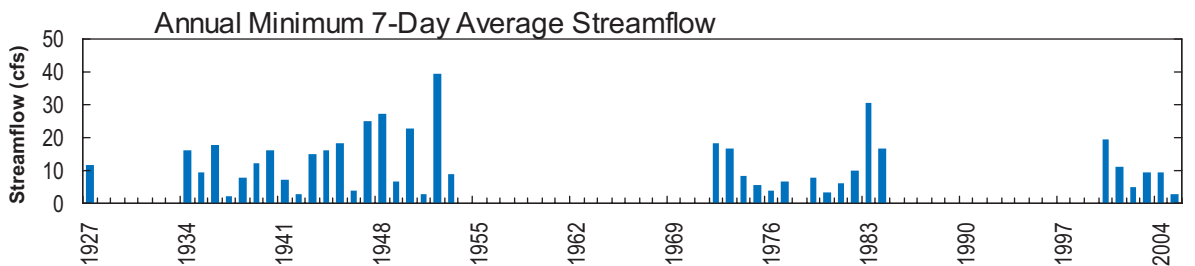
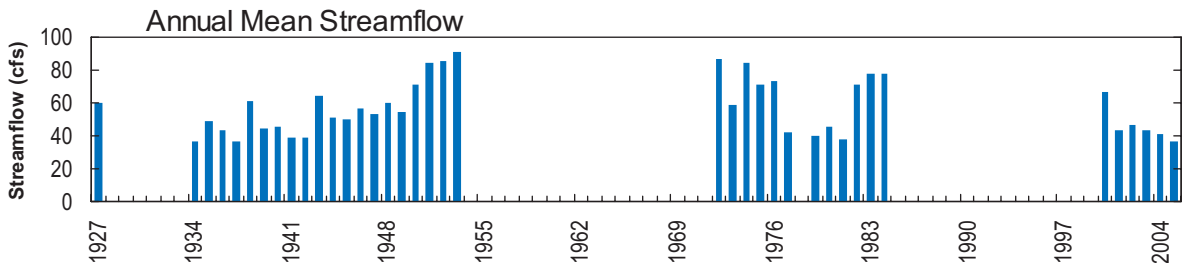
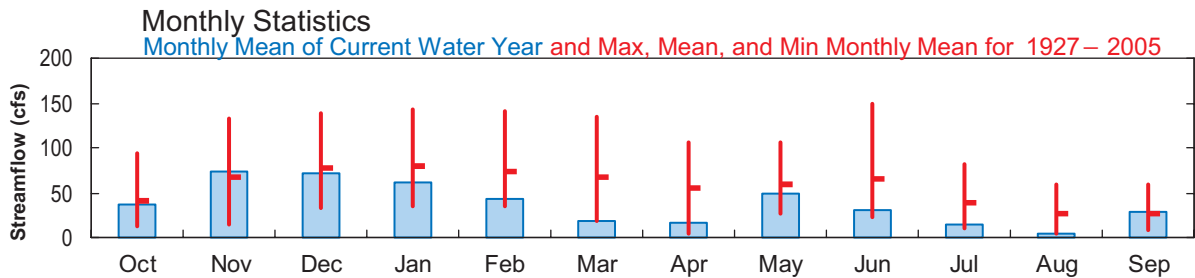
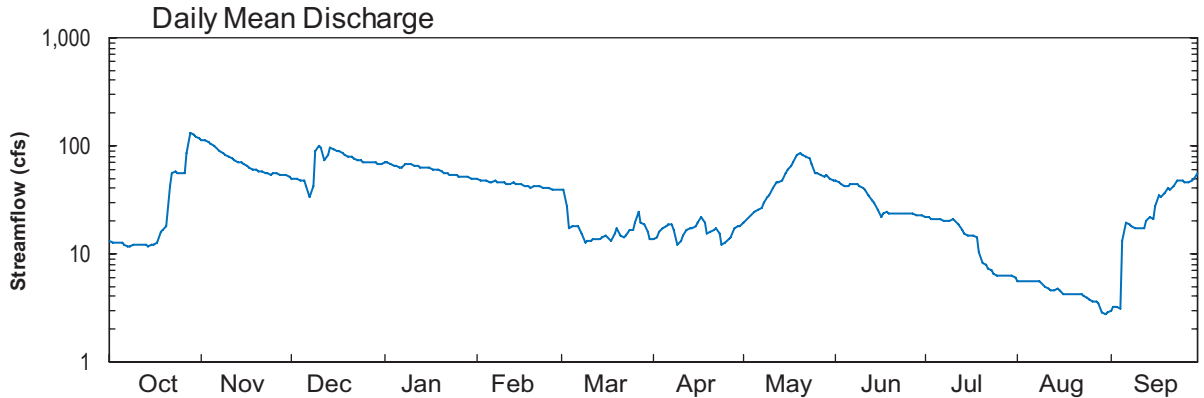
Longitude: 122° 09' 55"

Hydrologic Unit Code: 17100301

Douglas County

Datum: 5180.00 feet

Drainage Area: 54.9 mi²



UMPQUA RIVER BASIN

14313000 LEMOLO LAKE NEAR TOKETEE FALLS, OR

LOCATION.--Lat 43°19'22", long 122°11'36", in SE ¼ NW ¼ sec.11, T.26 S., R.5 E., Douglas County, Hydrologic Unit 17100301, at Lemolo No. 1 diversion dam on North Umpqua River, 1.1 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 July 1954 to April 2004. Elevation recorder April 2004 to current year. 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.--Capacity table dated 1992 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, 11,630 acre-ft June 19, elevation, 4,148.22 ft; minimum contents, 3,700 acre-ft Mar. 19, elevation, 4,122.94 ft.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,136.59	4,124.88	4,124.33	4,129.94	4,127.45	4,125.86	4,132.30	4,146.13	4,147.47	4,148.04	4,146.91	4,146.49
2	4,136.09	4,125.00	4,124.46	4,129.76	4,126.92	4,125.84	4,133.43	4,146.34	4,147.67	4,148.05	4,146.81	4,146.46
3	4,135.61	4,125.06	4,124.55	4,129.54	4,126.53	4,125.78	4,134.53	4,146.55	4,147.75	4,147.99	4,146.80	4,146.43
4	4,135.16	4,125.00	4,124.58	4,129.18	4,126.28	4,125.54	4,135.60	4,146.66	4,147.74	4,147.98	4,146.77	4,146.41
5	4,134.71	4,124.55	4,124.54	4,128.89	4,126.46	4,125.69	4,136.66	4,146.71	4,147.82	4,147.91	4,146.73	4,146.35
6	4,134.28	4,124.47	4,124.40	4,128.75	4,126.68	4,125.56	4,137.71	4,146.69	4,147.86	4,147.77	4,146.70	4,146.24
7	4,133.79	4,124.36	4,124.15	4,128.57	4,126.71	4,125.15	4,138.47	4,147.02	4,147.87	4,147.79	4,146.68	4,146.06
8	4,133.43	4,124.34	4,126.35	4,128.47	4,126.36	4,125.24	4,139.50	4,147.27	4,147.91	4,147.78	4,146.66	4,145.76
9	4,133.17	4,124.28	4,129.26	4,128.20	4,126.34	4,124.92	4,140.45	4,147.22	4,147.86	4,147.59	4,146.64	4,145.44
10	4,132.69	4,124.36	4,131.49	4,128.05	4,126.23	4,124.76	4,141.38	4,146.88	4,147.84	4,147.69	4,146.67	4,145.11
11	4,132.14	4,124.35	4,133.38	4,127.81	4,125.76	4,124.71	4,142.34	4,146.82	4,147.83	4,147.67	4,146.68	4,144.77
12	4,131.52	4,124.47	4,133.63	4,127.45	4,125.49	4,124.67	4,143.00	4,146.62	4,147.79	4,147.69	4,146.68	4,144.43
13	4,131.04	4,124.50	4,132.94	4,127.16	4,126.15	4,124.30	4,143.15	4,146.39	4,147.83	4,147.66	4,146.67	4,144.15
14	4,130.56	4,124.44	4,133.14	4,126.76	4,125.54	4,124.39	4,143.19	4,146.38	4,147.92	4,147.41	4,146.67	4,143.88
15	4,129.93	4,124.39	4,132.88	4,126.87	4,124.75	4,124.40	4,143.23	4,146.46	4,148.00	4,147.31	4,146.63	4,143.52
16	4,129.30	4,124.41	4,132.19	4,126.28	4,124.50	4,124.08	4,143.36	4,146.64	4,148.08	4,147.25	4,146.61	4,143.18
17	4,129.12	4,124.40	4,131.69	4,126.76	4,124.43	4,123.66	4,144.18	4,146.74	4,148.15	4,147.33	4,146.60	4,143.25
18	4,128.61	4,124.36	4,131.46	4,127.59	4,124.46	4,123.36	4,145.12	4,146.90	4,148.20	4,147.44	4,146.59	4,143.47
19	4,128.25	4,124.33	4,131.21	4,128.88	4,124.58	4,123.21	4,145.47	4,146.92	4,148.16	4,147.42	4,146.59	4,143.44
20	4,127.81	4,124.24	4,130.93	4,130.19	4,124.75	4,123.36	4,145.45	4,146.76	4,148.07	4,147.37	4,146.67	4,143.32
21	4,127.41	4,124.36	4,130.83	4,130.77	4,124.92	4,123.67	4,145.37	4,146.80	4,148.01	4,147.27	4,146.62	4,143.06
22	4,127.20	4,124.32	4,130.77	4,130.45	4,125.17	4,123.88	4,145.50	4,146.87	4,147.99	4,147.25	4,146.52	4,142.51
23	4,127.47	4,124.27	4,130.58	4,130.15	4,125.55	4,123.95	4,145.59	4,146.95	4,147.96	4,147.24	4,146.82	4,142.14
24	4,127.16	4,124.13	4,130.48	4,130.02	4,125.91	4,124.24	4,145.81	4,146.98	4,147.97	4,147.20	4,146.51	4,141.70
25	4,127.10	4,124.23	4,130.40	4,129.33	4,126.21	4,124.52	4,145.71	4,147.15	4,148.02	4,147.13	4,146.67	4,141.25
26	4,126.58	4,124.34	4,130.36	4,129.17	4,126.20	4,125.11	4,145.68	4,146.74	4,148.06	4,147.07	4,146.47	4,141.08
27	4,126.31	4,124.27	4,130.28	4,129.30	4,126.19	4,126.61	4,145.81	4,146.67	4,148.10	4,147.03	4,146.44	4,140.74
28	4,125.86	4,124.15	4,130.33	4,129.25	4,125.83	4,127.88	4,146.13	4,146.65	4,148.14	4,147.09	4,146.65	4,140.49
29	4,125.59	4,124.24	4,130.22	4,129.19	---	4,129.24	4,146.26	4,146.95	4,148.15	4,146.99	4,146.56	4,139.64
30	4,125.32	4,124.34	4,130.08	4,128.53	---	4,129.91	4,146.12	4,146.74	4,148.08	4,147.04	4,146.53	4,139.16
31	4,125.11	---	4,129.92	4,128.20	---	4,131.11	---	4,147.19	---	4,146.97	4,146.54	---
MEAN	4,130.16	4,124.43	4,129.54	4,128.69	4,125.80	4,125.31	4,142.22	4,146.77	4,147.94	4,147.47	4,146.65	4,143.66
MAX	4,136.59	4,125.06	4,133.63	4,130.77	4,127.45	4,131.11	4,146.26	4,147.27	4,148.20	4,148.05	4,146.91	4,146.49
MIN	4,125.11	4,124.13	4,124.15	4,126.28	4,124.43	4,123.21	4,132.30	4,146.13	4,147.47	4,146.97	4,146.44	4,139.16
(†)	4,190	4,010	5,420	4,960	4,360	5,750	10,800	11,220	11,580	11,130	10,960	8,240
(‡)	-3,330	-180	+1,410	-460	-600	+1,390	+5,050	+420	+360	-450	-170	-2,720
CAL YR2004	MEAN	---	MAX	---	MIN	---	AC-FT‡	+990				
WTR YR2005	MEAN	4,136.61	MAX	4,148.20	MIN	4,123.21	AC_FT‡	+720				

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

‡ Change in contents, in acre-feet.

UMPQUA RIVER BASIN

14313200 NORTH UMPQUA RIVER ABOVE WHITE MULE CREEK, NEAR TOKETEE FALLS, OR

LOCATION.--Lat 43°19'27", long 122°11'45", in SE ¼ NW ¼ sec.11, T.26 S., R.5 E., Douglas County, Hydrologic Unit 17100301, 0.1 mi downstream from Lemolo Reservoir and at mile 92.9.

DRAINAGE AREA.--170 mi².

PERIOD OF RECORD.--October 2003 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,030 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair. Minimum flow requirements are maintained by Lemolo Reservoir, which also diverts water into Lemolo No. 1 Power Canal for power generation. Diversion discharged back into North Umpqua River at rm 89.

AVERAGE DISCHARGE.--2 years (water years 2004-05), 57.4 ft³/s, 41,620 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, approximately 510 ft³/s (from hydrographic comparison with site 0.35 mi downstream) Feb. 14, 15, 2005, gage height, unknown; minimum discharge, 20 ft³/s Jan. 9, 2004.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, approximately 510 ft³/s (from hydrographic comparison with site 0.35 mi downstream) Feb. 14, 15, gage height, unknown; minimum daily discharge, 28 ft³/s Feb. 4-12, Mar. 1-27.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e35	e30	e29	e30	e29	e28	e29	e42	e354	e321	e37	e36
2	e35	e30	e29	e30	e29	e28	e30	e42	e355	e321	e36	e36
3	e35	e30	e29	e30	e29	e28	e30	e42	e378	e288	e36	e36
4	e35	e30	e29	e30	e28	e28	e30	e43	e391	e220	e36	e36
5	e34	e30	e29	e29	e28	e28	e31	e43	e391	e200	e36	e36
6	e34	e30	e29	e29	e28	e28	e32	e44	e392	e38	e36	e36
7	e34	e30	e29	e29	e28	e28	e32	e43	e391	e38	e36	e36
8	e33	e30	e30	e29	e28	e28	e33	e44	e391	e38	e36	e36
9	e33	e30	e35	e29	e28	e28	e33	e45	e390	e38	e36	e36
10	e33	e30	e34	e29	e28	e28	e34	e45	e380	e38	e36	e36
11	e33	e30	e33	e29	e28	e28	e34	e44	e377	e38	e36	e36
12	e33	e30	e33	e29	e28	e28	e35	e44	e376	e38	e36	e36
13	e33	e30	e33	e29	e67	e28	e35	e44	e349	e38	e36	e35
14	e33	e30	e37	e29	e419	e28	e35	e43	e331	e38	e36	e35
15	e32	e30	e37	e29	e438	e28	e35	e44	e332	e38	e36	e35
16	e32	e30	e36	e29	e352	e28	e36	e44	e332	e38	e36	e35
17	e32	e29	e32	e29	e330	e28	e36	e44	e332	e38	e36	e35
18	e32	e29	e32	e29	e313	e28	e37	e44	e332	e38	e36	e35
19	e31	e29	e31	e29	e303	e28	e37	e44	e352	e38	e36	e35
20	e31	e29	e31	e29	e299	e28	e37	e43	e362	e38	e36	36
21	e31	e29	e30	e29	e294	e28	e37	e43	e349	e38	e36	36
22	e31	e29	e30	e29	e284	e28	e38	e42	e342	e38	e36	36
23	e31	e29	e30	e29	e257	e28	e38	e41	e342	e38	e36	36
24	e31	e39	e30	e29	e258	e28	e39	e40	e329	e38	e36	36
25	e31	e29	e30	e29	e270	e28	e39	e43	e320	e38	e36	35
26	e31	e29	e30	e29	e315	e28	e40	e40	e320	e38	e36	35
27	e31	e29	e30	e29	e314	e28	e40	e39	e321	e38	e36	35
28	e31	e29	e30	e29	e222	e29	e42	e39	e321	e38	e36	35
29	e30	e29	e30	e29	---	e29	e42	e39	e321	e38	e36	34
30	e30	e29	e30	e29	---	e29	e42	e39	e321	e38	e36	34
31	e30	---	e30	e29	---	e29	---	e246	---	e38	e36	---
TOTAL	1,001	896	967	903	5,074	872	1,068	1,522	10,574	2,338	1,117	1,065
MEAN	32.3	29.9	31.2	29.1	181	28.1	35.6	49.1	352	75.4	36.0	35.5
MAX	35	39	37	30	438	29	42	246	392	321	37	36
MIN	30	29	29	29	28	28	29	39	320	38	36	34
AC-FT	1,990	1,780	1,920	1,790	10,060	1,730	2,120	3,020	20,970	4,640	2,220	2,110

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2005, BY WATER YEAR (WY)

MEAN	30.3	28.1	38.7	28.0	104	29.5	37.7	56.5	198	69.0	38.8	37.0
MAX	32.3	29.9	46.3	29.1	181	30.9	39.8	63.9	352	75.4	41.6	38.6
(WY)	(2005)	(2005)	(2004)	(2005)	(2005)	(2004)	(2004)	(2004)	(2005)	(2005)	(2004)	(2004)
MIN	28.3	26.2	31.2	26.8	28.6	28.1	35.6	49.1	43.8	62.6	36.0	35.5
(WY)	(2004)	(2004)	(2005)	(2004)	(2004)	(2005)	(2005)	(2005)	(2004)	(2004)	(2005)	(2005)

e Estimated

UMPQUA RIVER BASIN

14313200 NORTH UMPQUA RIVER ABOVE WHITE MULE CREEK, NEAR TOKETEE FALLS, OR—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2004 - 2005	
ANNUAL TOTAL	14,363		27,397			
ANNUAL MEAN	39.2		75.1		57.4	
HIGHEST ANNUAL MEAN					75.1	
LOWEST ANNUAL MEAN					39.9	
HIGHEST DAILY MEAN	350	Jul 29	438	Feb 15	438	Feb 15, 2005
LOWEST DAILY MEAN	25	Jan 9	28	Feb 4	25	Jan 9, 2004
ANNUAL SEVEN-DAY MINIMUM	25	Jan 8	28	Feb 4	25	Jan 8, 2004
ANNUAL RUNOFF (AC-FT)	28,490		54,340		41,620	
10 PERCENT EXCEEDS	47		317		55	
50 PERCENT EXCEEDS	35		35		35	
90 PERCENT EXCEEDS	28		29		28	



2005 Water Year
UMPQUA RIVER BASIN

14313200 N.UMPQUA R ABV WHITE MULE CK, NR TOKETEE FALLS, OR

Latitude: 43° 19 ' 27"

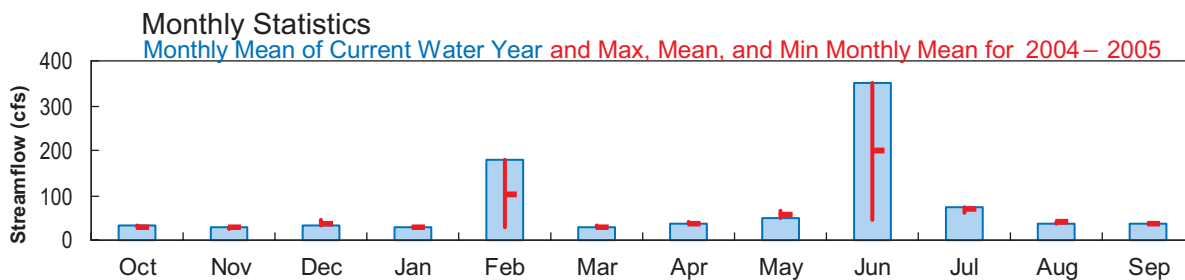
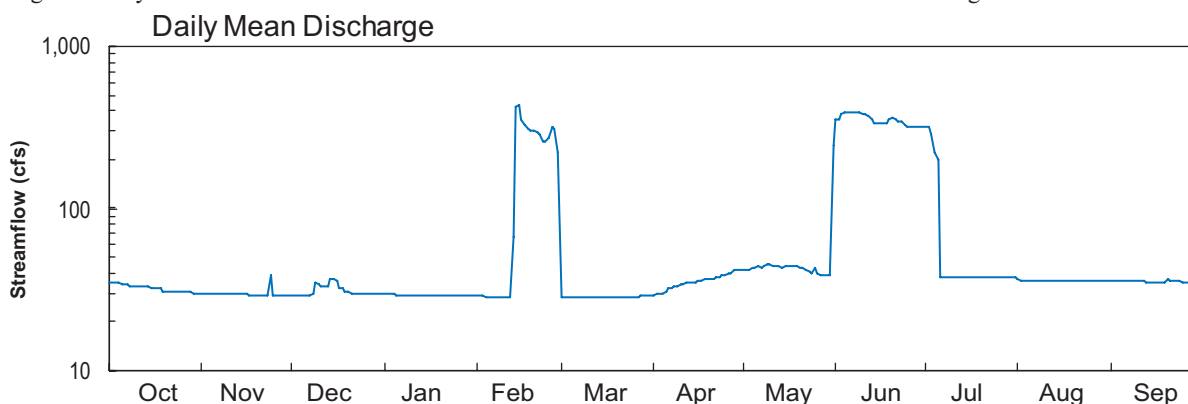
Longitude: 122° 11 ' 45"

Hydrologic Unit Code: 17100301

Douglas County

Datum: 4030 feet

Drainage Area: 170 mi²



UMPQUA RIVER BASIN

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

LOCATION.--Lat 43°19'20", long 122°11'40", in NW ¼ NW ¼ 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 September 2005 (discontinued). 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 1928-45, 1947-83), 423 ft³/s, 33.79 in/yr, 306,500 acre-ft/yr, adjusted for storage. 38 years (water years 1968-2005), 61.9 ft³/s, 44,810 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, 510 ft³/s Feb. 14, 15, gage height, 6.47 ft; minimum discharge, 27 ft³/s Mar. 1.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	30	29	30	29	28	29	42	354	321	37	36
2	35	30	29	30	29	28	30	42	355	321	36	36
3	35	30	29	30	29	28	30	42	378	288	36	36
4	35	30	29	30	28	28	30	43	391	220	36	36
5	34	30	29	29	28	28	31	43	391	200	36	36
6	34	30	29	29	28	28	32	44	392	38	36	36
7	34	30	29	29	28	28	32	43	391	38	36	36
8	33	30	30	29	28	28	33	44	391	38	36	36
9	33	30	35	29	28	28	33	45	390	38	36	36
10	33	30	34	29	28	28	34	45	380	38	36	36
11	33	30	33	29	28	28	34	44	377	38	36	36
12	33	30	33	29	28	28	35	44	376	38	36	36
13	33	30	33	29	67	28	35	44	349	38	36	35
14	33	30	37	29	419	28	35	43	331	38	36	35
15	32	30	37	29	438	28	35	44	332	38	36	35
16	32	30	36	29	352	28	36	44	332	38	36	35
17	32	29	32	29	330	28	36	44	332	38	36	35
18	32	29	32	29	313	28	37	44	332	38	36	35
19	31	29	31	29	303	28	37	44	352	38	36	35
20	31	29	31	29	299	28	37	43	362	38	36	35
21	31	29	30	29	294	28	e37	43	349	38	36	35
22	31	29	30	29	284	28	e38	42	342	38	36	35
23	31	29	30	29	257	28	38	41	342	38	36	35
24	31	39	30	29	258	28	39	40	329	38	36	35
25	31	29	30	29	270	28	39	43	320	38	36	35
26	31	29	30	29	315	28	40	40	320	38	36	34
27	31	29	30	29	314	28	40	39	321	38	36	34
28	31	29	30	29	222	29	42	39	321	38	36	34
29	30	29	30	29	---	29	42	39	321	38	36	34
30	30	29	30	29	---	29	42	39	321	38	36	34
31	30	---	30	29	---	29	---	246	---	38	36	---
TOTAL	1,001	896	967	903	5,074	872	1,068	1,522	10,574	2,338	1,117	1,057
MEAN	32.3	29.9	31.2	29.1	181	28.1	35.6	49.1	352	75.4	36.0	35.2
MAX	35	39	37	30	438	29	42	246	392	321	37	36
MIN	30	29	29	29	28	28	29	39	320	38	36	34
AC-FT	1,990	1,780	1,920	1,790	10,060	1,730	2,120	3,020	20,970	4,640	2,220	2,100

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2005, BY WATER YEAR (WY)

MEAN	37.1	34.6	40.0	41.7	38.1	37.0	42.3	114	145	88.0	70.5	52.7
MAX	126	150	185	307	181	200	119	411	687	332	321	299
(WY)	(1979)	(1979)	(1997)	(1997)	(2005)	(1972)	(1987)	(2003)	(1974)	(2003)	(1979)	(2003)
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)

UMPQUA RIVER BASIN

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

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1968 - 2005	
ANNUAL TOTAL	14,373		27,389			
ANNUAL MEAN	39.3		75.0		61.9	
HIGHEST ANNUAL MEAN					173	2003
LOWEST ANNUAL MEAN					24.1	1973
HIGHEST DAILY MEAN	354	Jul 29	438	Feb 15	1,070	Jun 4, 1975
LOWEST DAILY MEAN	27	Jan 5	28	Feb 4	15	Oct 15, 1970
ANNUAL SEVEN-DAY MINIMUM	27	Jan 5	28	Feb 4	17	Jan 24, 1985
ANNUAL RUNOFF (AC-FT)	28,510		54,330		44,810	
10 PERCENT EXCEEDS	47		317		135	
50 PERCENT EXCEEDS	36		35		30	
90 PERCENT EXCEEDS	28		29		23	

e Estimated

UMPQUA RIVER BASIN

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



2005 Water Year
UMPQUA RIVER BASIN

14313500 N UMPQUA RIVER BLW LEMOLO LK, NR TOKETEE FALLS, OR

Latitude: 43° 19' 20"

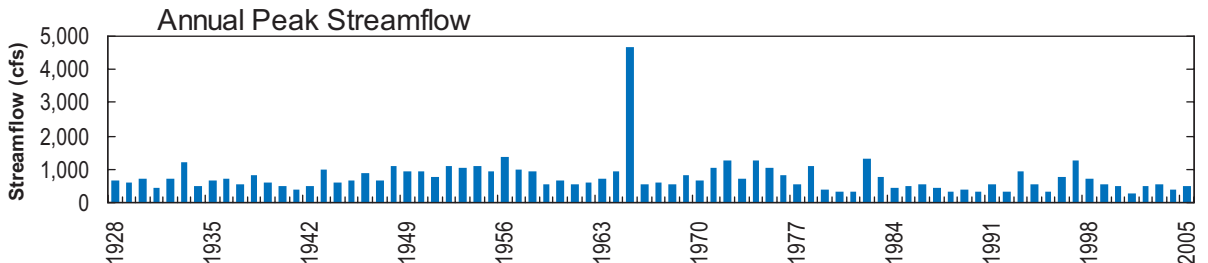
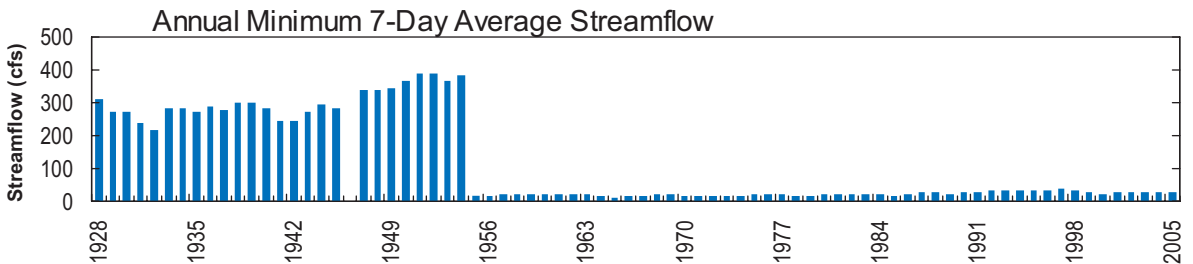
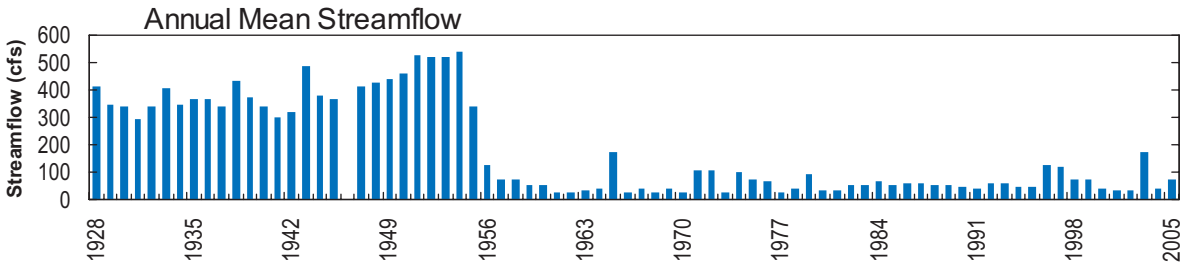
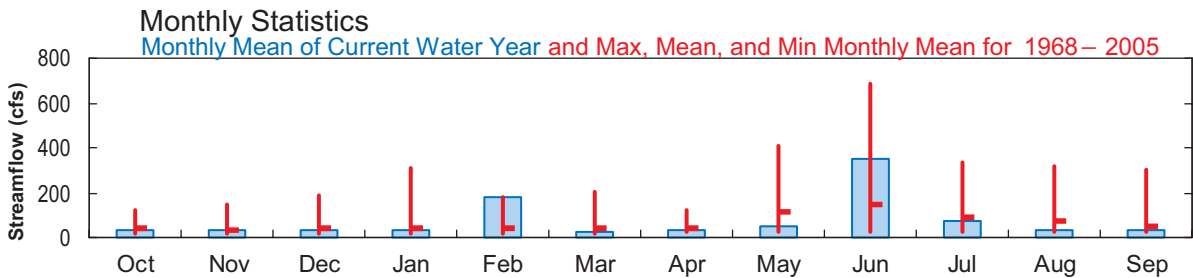
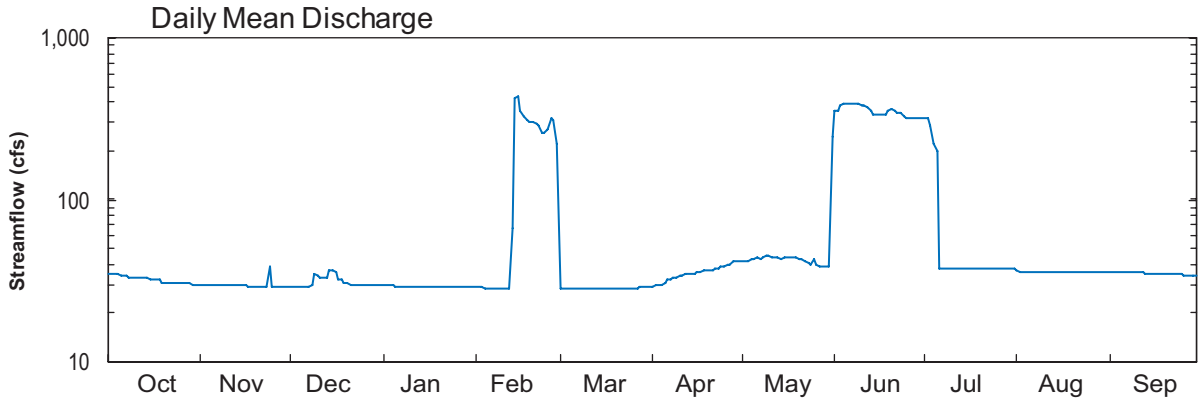
Longitude: 122° 11' 40"

Hydrologic Unit Code: 17100301

Douglas County

Datum: 4025.00 feet

Drainage Area: 170 mi²



UMPQUA RIVER BASIN

14313700 NORTH UMPQUA RIVER BELOW WARM SPRINGS CREEK, NEAR TOKETEE FALLS, OR

LOCATION.--Lat 43°21'18", long 122°15'03", in NE ¼ SW ¼ sec.31, T.25 S., R.5 E., Douglas County, Hydrologic Unit 17100301, downstream from Lemolo #1 Powerplant and at mile 88.4.

DRAINAGE AREA.--199 mi².

PERIOD OF RECORD.--October 2003 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,300 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for those over 400 ft³/s, which are fair. Flow regulated since 1954 by PacifiCorp.

AVERAGE DISCHARGE.--2 years (water years 2004-05), 54.8 ft³/s, 39,690 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 644 ft³/s May 25 2004, gage height, 6.84 ft; minimum discharge, 18 ft³/s July 1, 2004.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 626 ft³/s Sept. 22, gage height 6.81 ft; minimum discharge, 19 ft³/s Feb. 16.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	39	31	31	35	41	41	45	43	43	43	43
2	35	39	31	33	34	41	41	45	43	41	41	43
3	34	41	31	31	34	42	41	45	41	42	42	43
4	34	39	31	33	34	42	41	46	41	42	41	43
5	34	39	31	31	32	42	41	47	42	43	41	42
6	33	38	31	31	32	42	41	47	43	44	41	43
7	33	38	31	31	33	43	42	44	43	43	42	43
8	33	38	31	32	34	42	41	47	42	44	41	43
9	33	38	34	31	33	42	41	48	41	44	41	43
10	33	38	31	32	32	42	41	48	e41	44	41	43
11	33	38	30	32	31	42	41	47	e41	43	41	43
12	33	38	31	33	32	43	44	47	e41	44	41	43
13	32	38	33	32	31	43	43	47	e41	44	42	42
14	32	38	56	32	36	43	44	45	41	44	41	43
15	32	39	59	30	67	42	43	46	41	43	41	43
16	32	38	62	32	26	43	44	46	41	44	41	43
17	32	38	38	114	31	43	43	45	41	44	42	43
18	32	38	32	153	40	42	42	45	41	44	42	142
19	32	38	32	31	40	42	44	47	41	44	42	353
20	32	38	31	31	40	42	45	47	41	44	41	392
21	32	37	31	32	41	42	45	46	41	43	42	456
22	32	37	31	33	40	41	45	45	41	44	42	456
23	32	34	31	34	40	41	45	44	41	44	42	463
24	33	44	31	34	40	41	44	44	41	44	42	469
25	33	45	31	36	40	41	45	44	41	43	41	469
26	34	44	31	32	41	41	45	42	41	44	41	159
27	35	45	31	33	41	41	45	43	41	44	42	45
28	36	45	31	33	57	41	45	42	41	43	53	84
29	38	38	31	32	---	41	45	42	41	44	213	53
30	40	31	31	36	---	41	46	43	44	44	59	49
31	39	---	32	33	---	41	---	42	---	44	43	---
TOTAL	1,044	1,168	1,059	1,204	1,047	1,296	1,294	1,401	1,243	1,349	1,488	4,319
MEAN	33.7	38.9	34.2	38.8	37.4	41.8	43.1	45.2	41.4	43.5	48.0	144
MAX	40	45	62	153	67	43	46	48	44	44	213	469
MIN	32	31	30	30	26	41	41	42	41	41	41	42
AC-FT	2,070	2,320	2,100	2,390	2,080	2,570	2,570	2,780	2,470	2,680	2,950	8,570

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2005, BY WATER YEAR (WY)

MEAN	39.3	42.2	47.3	41.4	46.1	44.1	44.3	81.6	40.6	43.9	96.3	89.3
MAX	45.0	45.5	60.4	43.9	54.6	46.5	45.5	118	41.4	44.4	145	144
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2005)	(2004)	(2004)	(2005)
MIN	33.7	38.9	34.2	38.8	37.4	41.8	43.1	45.2	39.8	43.5	48.0	34.6
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2004)	(2005)	(2005)	(2004)

SUMMARY STATISTICS

FOR 2004 CALENDAR YEAR

FOR 2005 WATER YEAR

WATER YEARS 2004 - 2005

ANNUAL TOTAL	20,772	17,912	
ANNUAL MEAN	56.8	49.1	54.8
HIGHEST ANNUAL MEAN			60.5
LOWEST ANNUAL MEAN			49.1
HIGHEST DAILY MEAN	518	469	518
LOWEST DAILY MEAN	30	26	26
ANNUAL SEVEN-DAY MINIMUM	31	31	31
ANNUAL RUNOFF (AC-FT)	41,200	35,530	39,690
10 PERCENT EXCEEDS	80	46	59
50 PERCENT EXCEEDS	38	41	42
90 PERCENT EXCEEDS	32	32	32

e Estimated



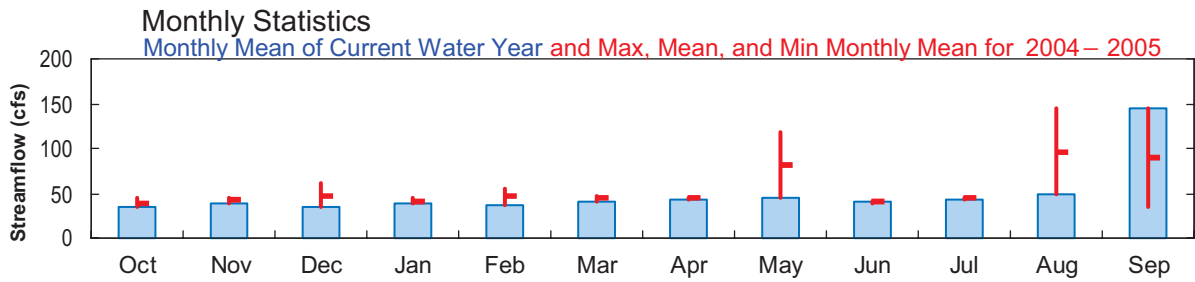
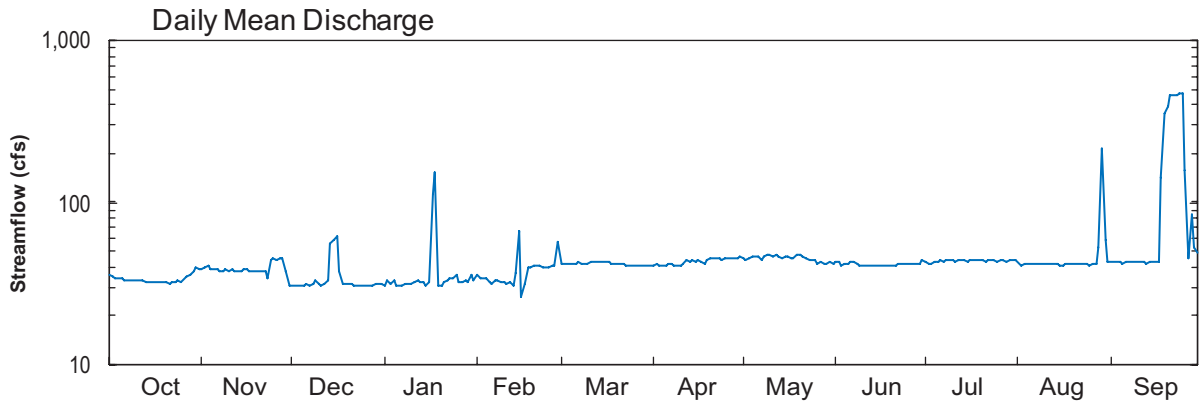
2005 Water Year
UMPQUA RIVER BASIN

14313700 N UMPQUA R BLW WARM SPRINGS CK NR TOKETEE FALLS, OR

Latitude: 43° 21 ' 18"
Douglas County

Longitude: 122° 15 ' 03"
Datum: 3300 feet

Hydrologic Unit Code: 17100301
Drainage Area: 199 mi²



UMPQUA RIVER BASIN

14314400 CLEARWATER NO 1 POWER CANAL, NEAR TOKETEE FALLS, OR

LOCATION.--Lat 43°15'10", long 122°17'15", in NW 1/4 NW 1/4 sec.1, T.27 S., R.4 E., Douglas County, Hydrologic Unit 17100301, Umpqua National Forest, on Mowich Loop Road (FS road 4780), 4.0 mi east of Toketee Falls.

PERIOD OF RECORD.--October 1966 to September 1983, October 2003 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,850 ft above NGVD of 1929, from topographic map.

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

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 175 ft³/s Dec. 9; minimum daily discharge, 2.9 ft³/s Apr. 29 to May 4.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	125	128	134	127	111	116	2.9	138	122	112	112
2	117	126	128	133	127	110	115	2.9	134	122	112	112
3	117	127	128	132	125	110	115	2.9	132	122	111	111
4	117	120	128	131	126	109	114	2.9	131	121	112	112
5	117	121	128	129	126	109	112	3.1	133	121	111	112
6	117	125	129	131	126	108	108	3.2	135	120	112	111
7	118	121	129	132	125	108	62	3.1	134	119	112	111
8	118	123	152	131	123	108	117	3.3	132	118	112	112
9	122	128	175	130	107	105	116	3.2	132	119	112	111
10	119	126	169	130	20	103	115	36	132	119	112	112
11	118	126	159	129	20	107	118	135	135	118	112	112
12	118	126	152	128	20	107	118	132	137	119	113	112
13	117	126	148	127	20	106	116	132	137	119	113	111
14	118	126	152	127	34	107	117	134	137	118	113	110
15	118	127	149	128	119	106	116	140	136	117	114	111
16	118	127	145	129	118	106	118	146	135	117	114	110
17	120	127	142	128	119	106	126	142	143	115	114	114
18	124	128	142	131	117	106	122	145	144	116	115	112
19	125	127	141	131	117	107	121	148	142	116	115	111
20	124	127	141	130	118	109	121	146	140	116	115	110
21	114	127	140	130	117	108	120	144	139	115	115	110
22	118	127	138	129	116	108	121	138	138	115	115	109
23	132	127	138	131	115	108	124	136	136	115	114	110
24	129	128	137	131	114	108	121	136	133	114	114	110
25	124	132	137	130	113	107	30	134	132	114	115	109
26	126	131	138	132	114	108	3.6	136	130	112	114	109
27	125	130	137	133	112	120	3.2	138	128	112	114	109
28	125	129	135	132	112	125	3.1	140	127	113	114	109
29	124	128	136	131	---	121	2.9	152	124	113	113	108
30	126	128	135	129	---	116	2.9	145	123	113	113	108
31	126	---	134	128	---	115	---	140	---	112	113	---
TOTAL	3,749	3,796	4,370	4,037	2,847	3,392	2,814.7	3,002.5	4,029	3,622	3,510	3,320
MEAN	121	127	141	130	102	109	93.8	96.9	134	117	113	111
MAX	132	132	175	134	127	125	126	152	144	122	115	114
MIN	114	120	128	127	20	103	2.9	2.9	123	112	111	108
AC-FT	7,440	7,530	8,670	8,010	5,650	6,730	5,580	5,960	7,990	7,180	6,960	6,590

CAL YR2004 TOTAL 49,036 MEAN 134 MAX 175 MIN 97 AC-FT 97,260
WTR YR2005 TOTAL 42,489.2 MEAN 116 MAX 175 MIN 2.9 AC-FT 84,280

UMPQUA RIVER BASIN

14314400 CLEARWATER NO 1 POWER CANAL, NEAR TOKETEE FALLS, OR—Continued



2005 Water Year
UMPQUA RIVER BASIN

14314400 CLEARWATER NO 1 POWER CANAL, NEAR TOKETEE FALLS, OR

Latitude: 43° 15' 10"

Longitude: 122° 17' 15"

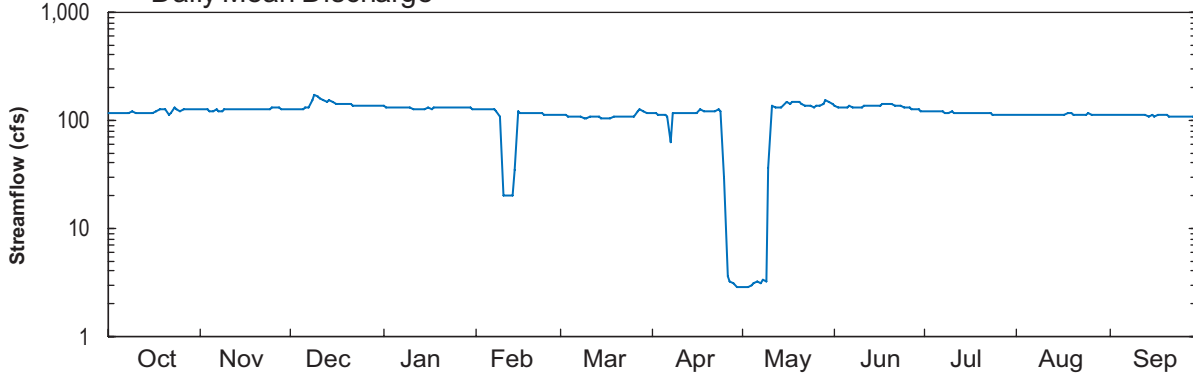
Hydrologic Unit Code: 17100301

Douglas County

Datum: 3850 feet

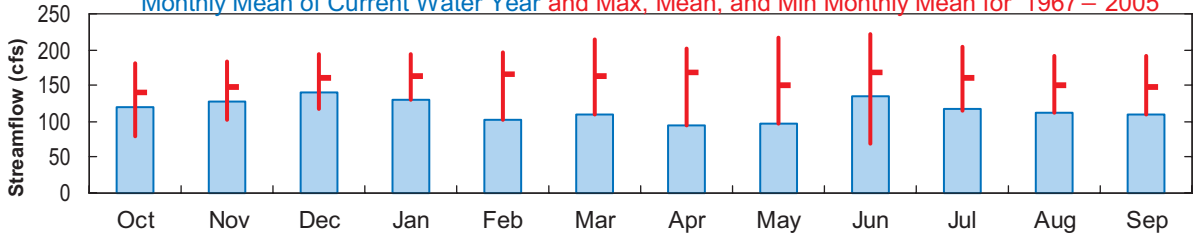
Drainage Area: mi²

Daily Mean Discharge

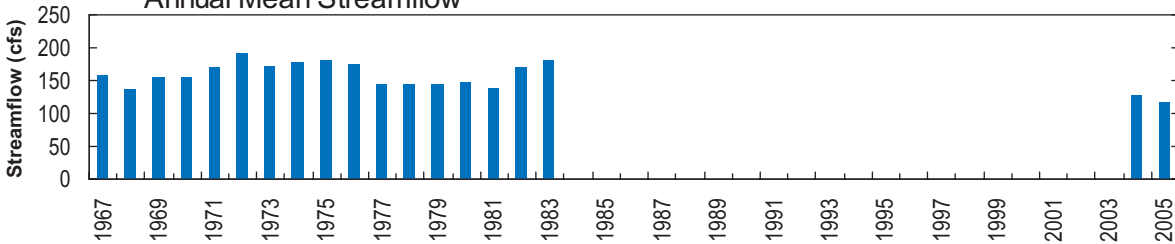


Monthly Statistics

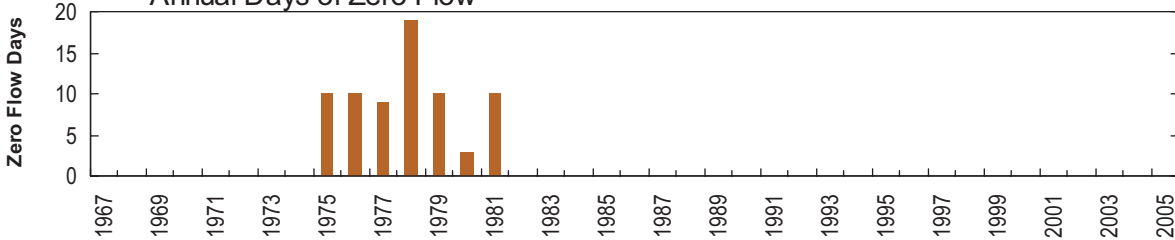
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1967 – 2005



Annual Mean Streamflow



Annual Days of Zero Flow



UMPQUA RIVER BASIN

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

LOCATION.--Lat 43°14'40", long 122°17'10", in SE ¼ 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 PacifiCorp). Prior to Dec. 1, 1953, at two sites about 0.4 mi downstream at different datums.

REMARKS.--No estimated daily discharges. Records fair. Published records after September 1983 did 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.--26 years (water years 1928-53), 155 ft³/s, 112,400 acre-ft/yr. 52 years (water years 1954-2005), 18.9 ft³/s, 13,680 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, 175 ft³/s May 8, 9, gage height, 4.44 ft; minimum discharge, 7.5 ft³/s Feb. 1-3.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.8	9.2	9.1	8.4	7.6	8.4	7.8	153	8.0	8.4	8.6	8.8
2	8.8	9.4	8.9	8.1	7.5	8.4	7.8	154	8.0	8.4	8.5	8.8
3	8.8	13	8.8	8.1	7.7	8.3	7.9	153	8.1	8.4	8.8	8.8
4	8.8	19	8.8	8.1	7.9	8.1	8.1	159	7.9	8.4	8.8	8.8
5	8.8	18	8.8	8.1	8.0	8.1	8.0	160	8.1	8.4	8.7	8.8
6	8.8	11	9.0	8.4	7.8	8.1	9.9	164	8.1	8.4	8.4	8.8
7	8.8	15	9.2	8.9	7.8	8.1	80	162	8.0	8.3	8.4	9.2
8	8.9	17	17	9.1	7.9	8.1	8.8	167	8.0	8.9	8.4	9.3
9	9.3	9.7	32	9.1	21	8.3	8.5	169	8.1	11	8.4	9.1
10	8.8	9.7	12	9.1	117	13	8.4	133	8.1	11	8.4	9.2
11	8.8	9.4	8.8	9.1	116	10	8.7	9.5	8.1	9.1	8.6	9.2
12	8.8	9.4	8.5	9.0	116	8.6	8.7	8.8	8.1	8.9	8.8	9.1
13	8.8	9.4	8.4	8.8	118	8.6	8.4	8.6	8.1	8.6	8.8	9.1
14	9.1	9.4	8.7	8.8	103	8.7	8.4	8.7	8.1	8.4	8.8	9.1
15	9.1	9.4	8.4	8.8	9.5	8.4	8.4	11	8.1	8.3	8.8	8.8
16	9.1	9.4	8.1	8.7	9.1	8.4	8.6	15	9.0	8.1	8.8	8.8
17	11	9.4	8.1	8.6	9.1	8.4	9.4	10	13	8.4	8.8	9.4
18	11	9.4	8.1	8.9	9.1	8.4	8.5	13	9.3	8.9	8.8	8.8
19	9.3	9.3	8.0	8.8	9.1	8.5	8.4	13	8.9	8.8	9.0	8.8
20	9.3	9.1	8.1	8.8	9.1	8.6	8.3	8.9	8.6	8.8	9.1	8.8
21	17	9.1	8.1	8.8	9.1	8.2	8.4	8.4	8.4	8.8	9.1	8.7
22	22	9.1	8.1	8.7	8.8	8.1	8.4	8.1	8.4	8.8	9.1	8.7
23	19	9.1	8.1	8.5	8.8	8.3	8.7	7.9	8.2	8.8	9.1	8.7
24	9.4	9.1	8.1	8.1	8.8	8.3	12	7.8	8.5	8.8	9.1	8.8
25	9.2	9.5	8.1	7.9	8.8	8.1	118	7.8	8.8	8.8	9.1	8.8
26	9.4	9.4	8.3	8.1	8.8	8.4	150	8.1	8.8	8.7	9.1	8.8
27	9.4	9.1	8.2	8.1	8.8	15	151	8.1	8.8	8.8	9.1	9.0
28	9.3	9.1	8.1	8.1	8.6	12	159	8.8	8.8	8.8	9.1	9.1
29	9.2	9.1	8.4	7.8	---	8.4	154	15	8.7	8.8	9.1	9.1
30	9.3	9.1	8.4	7.8	---	8.1	153	8.5	8.4	8.8	9.1	9.0
31	9.4	---	8.2	7.8	---	7.8	---	8.0	---	8.7	9.0	---
TOTAL	315.5	316.3	296.9	263.4	778.7	274.2	1,163.5	1,777.0	255.5	272.5	273.7	268.2
MEAN	10.2	10.5	9.58	8.50	27.8	8.85	38.8	57.3	8.52	8.79	8.83	8.94
MAX	22	19	32	9.1	118	15	159	169	13	11	9.1	9.4
MIN	8.8	9.1	8.0	7.8	7.5	7.8	7.8	7.8	7.9	8.1	8.4	8.7
AC-FT	626	627	589	522	1,540	544	2,310	3,520	507	541	543	532

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2005, BY WATER YEAR (WY)

MEAN	13.7	12.9	15.1	15.0	16.3	15.4	20.9	52.6	31.1	14.3	11.1	7.81
MAX	130	177	119	143	177	116	67.7	169	115	88.3	100	59.4
(WY)	(2002)	(2001)	(1965)	(1997)	(1996)	(1972)	(1972)	(1972)	(1958)	(1993)	(1996)	(1994)
MIN	3.12	1.50	1.70	0.35	0.34	0.42	2.33	2.98	5.18	3.41	2.15	2.76
(WY)	(1958)	(1955)	(1955)	(1954)	(1955)	(1955)	(1955)	(1968)	(1973)	(1969)	(1954)	(1954)

UMPQUA RIVER BASIN

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

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1954 - 2005	
ANNUAL TOTAL	3,501.1		6,255.4			
ANNUAL MEAN	9.57		17.1		18.9	
HIGHEST ANNUAL MEAN					52.0	1997
LOWEST ANNUAL MEAN					5.85	1987
HIGHEST DAILY MEAN	75	May 24	169	May 9	779	Dec 23, 1964
LOWEST DAILY MEAN	7.2	Jun 30	7.5	Feb 2	0.10	Jan 9, 1954
ANNUAL SEVEN-DAY MINIMUM	7.3	Sep 18	7.7	Jan 29	0.14	Jan 8, 1954
ANNUAL RUNOFF (AC-FT)	6,940		12,410		13,680	
10 PERCENT EXCEEDS	11		13		46	
50 PERCENT EXCEEDS	8.8		8.8		6.2	
90 PERCENT EXCEEDS	7.8		8.1		4.5	

UMPQUA RIVER BASIN

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



2005 Water Year
UMPQUA RIVER BASIN

14314500 CLEARWATER RIVER ABV TRAP CK NR TOKETEE FALLS, OR

Latitude: 43° 14' 40"

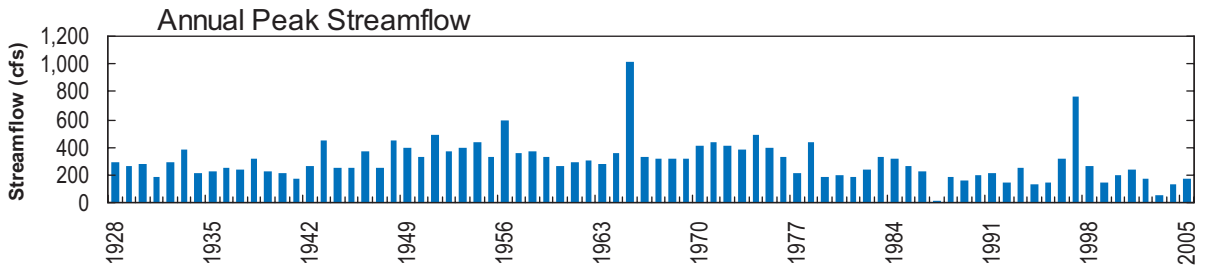
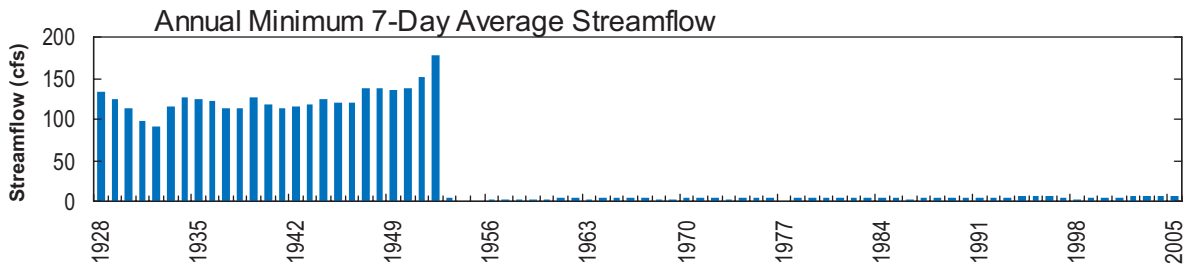
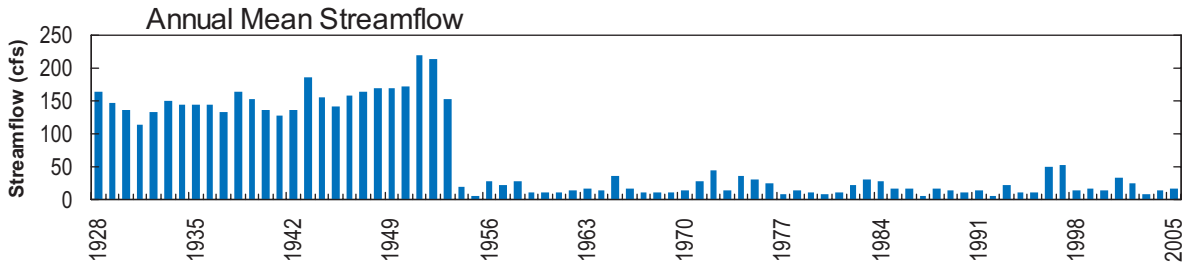
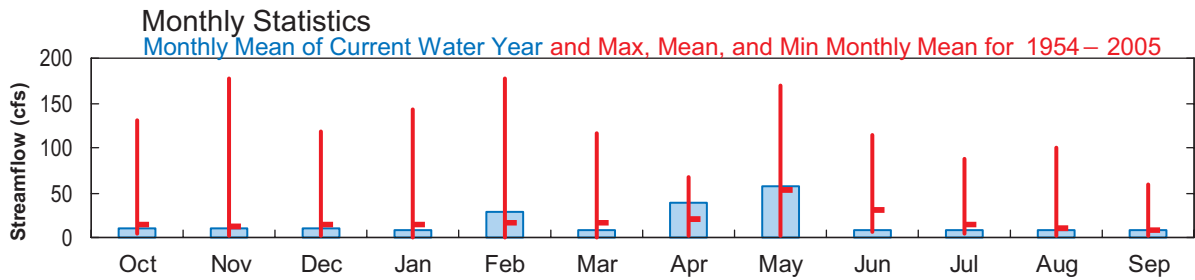
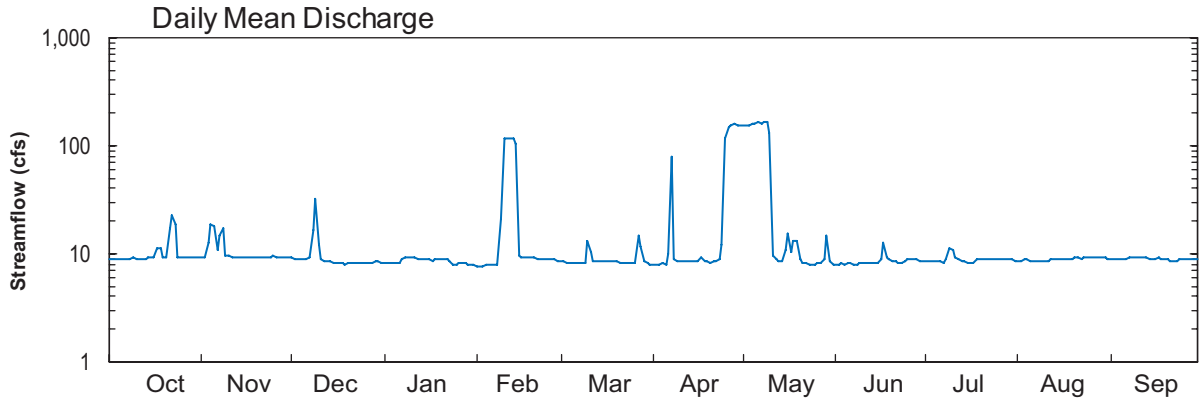
Longitude: 122° 17' 10"

Hydrologic Unit Code: 17100301

Douglas County

Datum: 3862.84 feet

Drainage Area: 41.6 mi²



UMPQUA RIVER BASIN

14314600 CLEARWATER NO 2 POWER CANAL, NEAR TOKETEE FALLS, OR

LOCATION.--Lat 43°15'34", long 122°23'54", in NE ¼ SE ¼ sec.1, sec.36, T.26 S., R.3 E., Douglas County, Hydrologic Unit 17100301, Umpqua National Forest, on Mowich Loop Road (FS roan 4780), 1.0 mi east of Toketee Falls.

PERIOD OF RECORD.--October 2003 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,190 ft above NGVD of 1929, from topographic map

REMARKS.--Records fair. Flow completely regulated.

AVERAGE DISCHARGE.--2 years (water years 2004-05), 148 ft³/s, 107,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.---Maximum daily discharge, 302 ft³/s Dec. 9, 2004; minimum daily discharge, 2.0 ft³/s Jan. 17, 18, 2004.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 302 ft³/s Dec. 9; minimum daily discharge, 95 ft³/s Sept. 2, 26.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	117	128	120	140	134	130	156	173	187	133	113	116
2	119	134	118	129	125	131	137	173	179	128	112	95
3	120	138	119	133	143	130	152	170	172	132	111	124
4	117	134	118	132	126	126	152	177	166	123	112	114
5	118	130	112	128	138	117	162	180	163	135	107	100
6	108	129	125	127	132	128	139	186	185	125	117	104
7	118	124	123	125	132	127	166	185	186	124	113	119
8	117	127	163	133	133	114	189	193	169	130	111	113
9	128	125	302	134	125	134	157	205	181	124	114	113
10	125	129	274	128	112	127	172	223	165	127	111	120
11	120	127	225	126	124	123	175	220	166	126	111	113
12	113	122	210	129	127	124	193	219	164	122	112	112
13	118	126	181	124	133	121	175	181	158	121	113	110
14	117	125	188	125	134	127	180	216	158	120	111	111
15	118	121	178	130	149	121	173	211	149	122	113	113
16	116	126	165	128	125	123	174	221	155	119	109	115
17	122	120	163	126	123	116	184	248	159	116	111	122
18	123	130	158	118	133	116	197	232	154	128	110	112
19	132	122	154	149	121	125	188	249	157	126	113	113
20	129	128	149	147	129	132	187	238	154	111	112	112
21	119	123	148	144	120	128	179	231	155	120	111	106
22	132	124	148	163	135	129	182	211	143	121	110	112
23	138	125	142	150	134	119	186	207	148	118	111	116
24	159	123	140	131	126	130	180	198	115	121	110	116
25	120	129	135	135	134	127	154	193	165	116	111	116
26	129	131	135	132	113	128	177	177	141	114	112	95
27	130	129	149	157	135	160	177	196	138	113	111	121
28	131	128	135	143	122	152	188	176	120	120	111	114
29	118	125	134	137	---	160	178	207	140	e120	109	97
30	127	120	140	147	---	146	174	215	144	117	112	120
31	125	---	131	123	---	120	---	190	---	113	106	---
TOTAL	3,823	3,802	4,882	4,173	3,617	3,991	5,183	6,301	4,736	3,785	3,450	3,364
MEAN	123	127	157	135	129	129	173	203	158	122	111	112
MAX	159	138	302	163	149	160	197	249	187	135	117	124
MIN	108	120	112	118	112	114	137	170	115	111	106	95
AC-FT	7,580	7,540	9,680	8,280	7,170	7,920	10,280	12,500	9,390	7,510	6,840	6,670

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2005, BY WATER YEAR (WY)

MEAN	126	131	151	133	167	176	193	199	159	123	101	115
MAX	130	136	157	135	204	223	212	203	160	125	111	117
(WY)	(2004)	(2004)	(2005)	(2005)	(2004)	(2004)	(2004)	(2005)	(2004)	(2004)	(2005)	(2004)
MIN	123	127	145	131	129	129	173	195	158	122	90.2	112
(WY)	(2005)	(2005)	(2004)	(2004)	(2005)	(2005)	(2005)	(2004)	(2005)	(2005)	(2004)	(2005)

SUMMARY STATISTICS

FOR 2004 CALENDAR YEAR

FOR 2005 WATER YEAR

WATER YEARS 2004 - 2005

ANNUAL TOTAL	56,783.4	51,107	
ANNUAL MEAN	155	140	148
HIGHEST ANNUAL MEAN			155
LOWEST ANNUAL MEAN			140
HIGHEST DAILY MEAN	302	Dec 9	302
LOWEST DAILY MEAN	2.0	Jan 17	95
ANNUAL SEVEN-DAY MINIMUM	3.0	Jan 12	108
ANNUAL RUNOFF (AC-FT)	112,600		101,400
10 PERCENT EXCEEDS	226		185
50 PERCENT EXCEEDS	147		128
90 PERCENT EXCEEDS	114		112

e Estimated

UMPQUA RIVER BASIN

14314600 CLEARWATER NO 2 POWER CANAL, NEAR TOKETEE FALLS, OR—Continued



2005 Water Year
UMPQUA RIVER BASIN

14314600 CLEARWATER NO 2 POWER CANAL NEAR TOKETEE FALLS, OR

Latitude: 43° 15' 34"

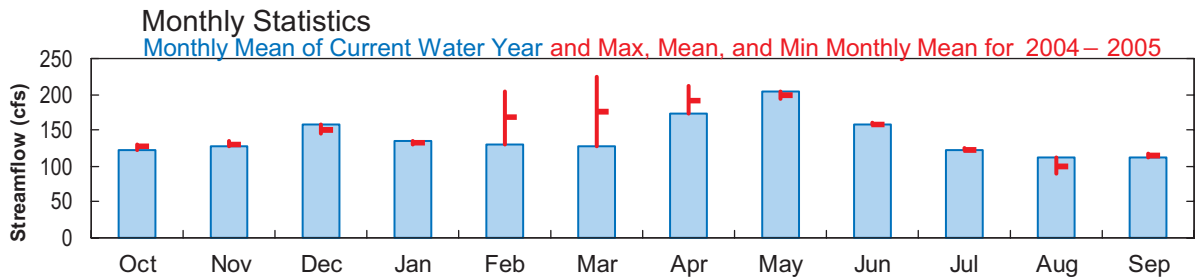
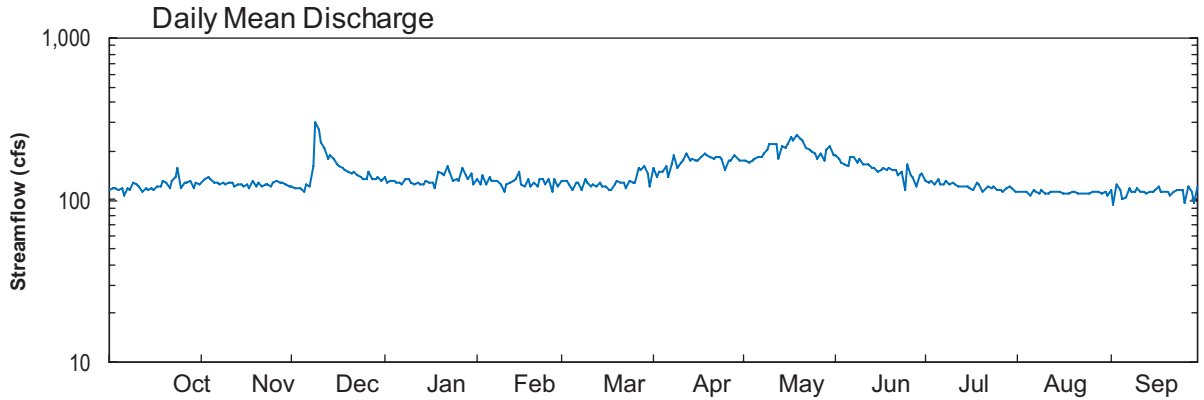
Longitude: 122° 23' 54"

Hydrologic Unit Code: 17100301

Douglas County

Datum: 3190 feet

Drainage Area: mi²



UMPQUA RIVER BASIN

14314700 CLEARWATER RIVER BELOW MOWICH CREEK, NEAR TOKETEE FALLS, OR

LOCATION.--Lat 43°15'04", long 122°20'14", in NE ¼ sec.4, T.27 S., R.4 E., Douglas County, Hydrologic Unit 17100301, Umpqua National Forest, 2.9 mi east of Toketee Falls, and at mile 4.8.

DRAINAGE AREA.--59.25 mi².

PERIOD OF RECORD.--October 2003 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,180 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair. Minimum flow requirements are maintained by diversion dam 0.1 mi upstream from gage, which diverts water into Clearwater #2 Canal for power generation at Clearwater #2 Powerplant. Diversion discharged back into the North Umpqua River at Toketee Lake.

AVERAGE DISCHARGE.--2 years (water years 2004-05), 19.6 ft³/s, 14,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 248 ft³/s June 20, 2004, gage height, 5.94 ft; minimum discharge, 5.6 ft³/s July 1, 2004.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 90 ft³/s Dec. 9, gage height, 5.07 ft; minimum discharge, 8.5 ft³/s Sept. 2.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	e13	15	16	15	16	17	18	18	17	16	15
2	15	15	14	16	15	16	17	18	17	17	16	14
3	15	15	14	16	16	15	17	18	18	17	16	e14
4	15	15	14	16	15	15	17	18	18	16	15	e14
5	15	15	14	16	16	15	17	19	17	17	15	e14
6	14	15	15	16	15	15	16	19	18	16	16	e15
7	15	15	16	16	15	15	17	19	18	17	15	e14
8	15	15	17	16	15	15	19	19	17	17	15	15
9	16	15	60	16	15	16	17	20	18	17	15	15
10	15	15	32	16	15	16	18	21	17	17	15	15
11	15	15	21	16	15	15	18	21	17	17	15	15
12	15	15	20	16	16	16	18	26	17	17	15	15
13	15	15	18	16	16	15	17	19	16	16	15	14
14	15	15	19	16	16	15	17	20	17	16	14	15
15	15	15	18	16	16	15	17	20	16	17	15	15
16	15	15	17	16	14	15	18	23	17	16	15	15
17	e17	14	17	16	15	15	18	21	17	16	15	16
18	e17	15	17	16	15	15	19	21	17	17	15	15
19	e22	15	17	17	15	16	e18	24	17	16	15	15
20	e22	15	17	17	15	16	e19	20	17	16	15	15
21	e13	15	17	17	15	15	18	22	18	17	15	14
22	e13	15	17	17	15	16	19	20	17	16	15	15
23	e22	15	16	17	16	15	19	19	17	16	15	15
24	e22	15	16	15	15	16	18	18	16	17	15	15
25	e21	16	16	16	16	15	18	18	18	17	15	15
26	e18	15	15	16	15	15	19	18	18	16	15	14
27	e16	15	17	17	16	17	19	19	17	16	15	15
28	e19	15	16	16	15	17	19	18	17	16	15	16
29	e13	14	16	17	---	17	18	19	17	16	15	14
30	e13	14	16	16	---	16	19	19	18	16	15	15
31	e13	---	16	15	---	16	---	19	---	16	14	---
TOTAL	501	446	570	501	428	482	537	613	517	511	467	443
MEAN	16.2	14.9	18.4	16.2	15.3	15.5	17.9	19.8	17.2	16.5	15.1	14.8
MAX	22	16	60	17	16	17	19	26	18	17	16	16
MIN	13	13	14	15	14	15	16	18	16	16	14	14
AC-FT	994	885	1,130	994	849	956	1,070	1,220	1,030	1,010	926	879

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2005, BY WATER YEAR (WY)

MEAN	14.0	16.4	22.1	34.5	13.3	13.2	14.1	16.7	23.5	19.6	31.2	15.9
MAX	16.2	17.9	25.9	52.9	15.3	15.5	17.9	19.8	29.7	22.7	47.4	17.1
(WY)	(2005)	(2004)	(2004)	(2004)	(2005)	(2005)	(2005)	(2005)	(2004)	(2004)	(2004)	(2004)
MIN	11.8	14.9	18.4	16.2	11.4	10.8	10.3	13.7	17.2	16.5	15.1	14.8
(WY)	(2004)	(2005)	(2005)	(2005)	(2004)	(2004)	(2004)	(2004)	(2005)	(2005)	(2005)	(2005)

SUMMARY STATISTICS

FOR 2004 CALENDAR YEAR

FOR 2005 WATER YEAR

WATER YEARS 2004 - 2005

ANNUAL TOTAL	8,128.8	6,016		
ANNUAL MEAN	22.2	16.5		19.6
HIGHEST ANNUAL MEAN				22.7
LOWEST ANNUAL MEAN				16.5
HIGHEST DAILY MEAN	173	Jun 20	60	Dec 9
LOWEST DAILY MEAN	8.8	Jul 12	13	Oct 21
ANNUAL SEVEN-DAY MINIMUM	9.0	Jul 6	14	Oct 29
ANNUAL RUNOFF (AC-FT)	16,120		11,930	14,200
10 PERCENT EXCEEDS	21		19	19
50 PERCENT EXCEEDS	14		16	15
90 PERCENT EXCEEDS	10		15	10

e Estimated

UMPQUA RIVER BASIN

14314700 CLEARWATER RIVER BELOW MOWICH CREEK, NEAR TOKETEE FALLS, OR—Continued



2005 Water Year
UMPQUA RIVER BASIN

14314700 CLEARWATER R BLW MOWICH CREEK, NR TOKETEE FALLS, OR

Latitude: 43° 15 ' 04"

Longitude: 122° 20 ' 14"

Hydrologic Unit Code: 17100301

Douglas County

Datum: 3180 feet

Drainage Area: 59.3 mi²

